GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: December 18, 2003, 14:27:14 ; Search time 10 Seconds
(without alignments)
3.757 Million cell updates/sec

Title: us-09-828-344-3
Perfect score: 2077
Sequence: 1 ccgagcgccagcgcggggaa.....taaaaacttgatttttttgt 2077

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 586 seqs, 9044 residues

Total number of hits satisfying chosen parameters: 1172

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 670 summaries

Database : rng.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
c	1	20	1.0	20	1	AAD49257	Human phospholipid
c	2	20	1.0	20	1	AAD49258	Human phospholipid
c	3	20	1.0	20	1	AAD49259	Human phospholipid
c	4	20	1.0	20	1	AAD49260	Human phospholipid
c	5	20	1.0	20	1	AAD49261	Human phospholipid
c	6	20	1.0	20	1	AAD49262	Human phospholipid
c	7	20	1.0	20	1	AAD49263	Human phospholipid
c	8	20	1.0	20	1	AAD49264	Human phospholipid
c	9	20	1.0	20	1	AAD49265	Human phospholipid
c	10	20	1.0	20	1	AAD49266	Human phospholipid
c	11	20	1.0	20	1	AAD49267	Human phospholipid
c	12	20	1.0	20	1	AAD49268	Human phospholipid
c	13	20	1.0	20	1	AAD49269	Human phospholipid
c	14	20	1.0	20	1	AAD49270	Human phospholipid
c	15	20	1.0	20	1	AAD49271	Human phospholipid
c	16	20	1.0	20	1	AAD49272	Human phospholipid
c	17	20	1.0	20	1	AAD49273	Human phospholipid
c	18	20	1.0	20	1	AAD49274	Human phospholipid
c	19	17.6	0.8	24	1	AAZ36033	Probe for mouse IG
	20	16.8	0.8	20	1	ABK30560	Human glioma-assoc
c	21	16.8	0.8	20	1	AAD49339	Mouse phospholipid
c	22	16.8	0.8	20	1	AAD49341	Mouse phospholipid
c	23	16.8	0.8	20	1	AAD49346	Mouse phospholipid
c	24	16.8	0.8	20	1	AAD49348	Mouse phospholipid
c	25	16.4	0.8	20	1	AAD49338	Mouse phospholipid
c	26	16.2	0.8	21	1	AAT94317	Human DPC4 sequenc
	27	16.2	0.8	23	1	AAX19757	Connexin 26 PCR pr
c	28	15.8	0.8	20	1	AAD49342	Mouse phospholipid
	29	15.2	0.7	20	1	AAT29770	Barley betaine ald
	30	15.2	0.7	20	1	AAT03667	Hepatitis C diagno
c	31	15.2	0.7	20	1	AAX97424	Primer used to amp
	32	15.2	0.7	20	1	AAH39830	SNP specific lower
c	33	15.2	0.7	20	1	AAF69294	Integrin-linked ki
c	34	15.2	0.7	20	1	AAD49343	Mouse phospholipid
c	35	15.2	0.7	20	1	AAD49347	Mouse phospholipid
	36	15.2	0.7	21	1	AAZ76849	Human biallelic ma
	37	15.2	0.7	21	1	ABZ21509	Human collagen rel
c	38	15	0.7	20	1	AAZ00580	Human GPC4 primer
c	39	14.8	0.7	18	1	AAZ70085	Human biallelic ma
	40	14.8	0.7	20	1	AAV48067	Murine B7-2 target
c	41	14.8	0.7	20	1	AAZ23719	M. fossilis Cytb p
	42	14.8	0.7	20	1	AAZ04493	PCR primer used to
	43	14.8	0.7	20	1	AAZ57197	Mouse TBP PCR prim
	44	14.8	0.7	20	1	AAF32909	Human B7-2 mRNA an
	45	14.8	0.7	21	1	ABQ93574	Human DICS1/DISC2
c	46	14.8	0.7	21	1	ABK86759	PCR primer, 14L3,
	47	14.4	0.7	17	1	AAF02994	Hammerhead ribozym
c	48	14.4	0.7	18	1	ABZ10940	Haematopoietic cel
c	49	14.4	0.7	19	1	AAT35504	Primer 14R for hum
c	50	14.4	0.7	19	1	AAA07620	Primer 14 R for SS
	51	14.4	0.7	20	1	AAL46072	Human prolactin co
c	52	14.4	0.7	20	1	AAA28061	Human androgen shu
	53	14.4	0.7	20	1	AAZ48616	PCR primer for hum
	54	14.4	0.7	20	1	AAZ48621	PCR primer for hum
	55	14.4	0.7	20	1	AAZ38493	Human microtubule-
c	56	14.4	0.7	20	1	AAD49340	Mouse phospholipid
c	57	14.4	0.7	20	1	ABV76077	Aspergillus niger
	58	14.2	0.7	19	1	AAT76346	Human fibronectin
	59	14.2	0.7	19	1	AAZ32742	Primer T7 variant.
	60	14.2	0.7	19	1	AAX54148	Human fibronectin
	61	14.2	0.7	19	1	AAF19714	Human fibronectin
	62	14.2	0.7	19	1	AAA85816	Cyclin B1 ribozyme
	63	14.2	0.7	19	1	AAA33592	Low adenosine anti
	64	14.2	0.7	19	1	AAH60978	Cyclin B1 ribozyme
	65	14.2	0.7	19	1	ABQ81733	Neospora caninum S
	66	14.2	0.7	19	1	ABQ82081	Neospora caninum S
	67	14.2	0.7	19	1	ABA00112	Primer NCSAG1320.
	68	14.2	0.7	20	1	AAQ53124	Gene detection seq
c	69	14.2	0.7	20	1	AAV20060	N-ras probe 682C.
c	70	14.2	0.7	20	1	AAA66403	Dog genomic marker
	71	14.2	0.7	20	1	AAZ94263	Human ELF5 specifi
	72	14.2	0.7	20	1	AAD15561	Brome mosaic virus
c	73	14.2	0.7	20	1	AAD15562	BMV 35kDa protein
	74	14.2	0.7	20	1	AAS09015	Human SAP140 intro
c	75	14.2	0.7	20	1	AAF77260	Alpha-mannosidase
c	76	14.2	0.7	20	1	AAD44827	Human raf kinase r
c	77	14.2	0.7	20	1	ABT32335	Neuroblastoma-rela
c	78	14	0.7	19	1	ABZ77613	PCR primer used to
c	79	14	0.7	20	1	ABZ70453	Human TREM-2 forwa
c	80	13.8	0.7	17	1	AAX71584	Human KDR VEGF rec
c	81	13.8	0.7	17	1	AAX71585	Human KDR VEGF rec
	82	13.8	0.7	17	1	ABK02935	Human CD20 Hammerh
	83	13.8	0.7	17	1	ABK03302	Human CD20 Inozyme
	84	13.8	0.7	17	1	ABN07621	Human GDMLP-1 17-m
	85	13.8	0.7	17	1	ABN07622	Human GDMLP-1 17-m
	86	13.8	0.7	18	1	AAQ41645	Alpha factor-lys-a
	87	13.8	0.7	18	1	AAZ71313	Human biallelic ma
c	88	13.8	0.7	18	1	AAC63796	Bovine Flk-1 mRNA
c	89	13.8	0.7	18	1	ABL58519	Bovine FLK-1 mRNA
c	90	13.8	0.7	18	1	ABL60470	Bovine Flk-1 mRNA
	91	13.8	0.7	18	1	ABK31549	Oligonucleotide pr
c	92	13.8	0.7	18	1	ABZ81757	Huntington's disea
	93	13.8	0.7	18	1	ABZ10414	Haematopoietic cel
c	94	13.8	0.7	18	1	ABZ10996	Haematopoietic cel
	95	13.8	0.7	19	1	AAA84266	Cyclin D1 ribozyme
c	96	13.8	0.7	19	1	AAD14643	DEN-1 PDK-13 virus
	97	13.8	0.7	19	1	AAH59428	Cyclin D1 ribozyme
	98	13.8	0.7	19	1	ABA98268	Primer 34 for sequ
c	99	13.8	0.7	19	1	ABL89198	HIV-1 related bind
c	100	13.4	0.6	15	1	AAF47736	IGFBP3 oligonucleo
c	101	13.4	0.6	15	1	AAF47737	IGFBP3 oligonucleo
c	102	13.4	0.6	16	1	AAT43215	Primer P4 for phos
	103	13.4	0.6	17	1	AAF02431	Hammerhead ribozym
	104	13.4	0.6	17	1	AAF02993	Hammerhead ribozym
c	105	13.4	0.6	17	1	ABT34374	Tumour suppression
	106	13.4	0.6	18	1	AAZ70132	Human biallelic ma

c 107	13.4	0.6	19	1	AAT28506	P. aeruginosa dete
c 108	13.4	0.6	19	1	AAA72197	Mouse retinoid X r
c 109	13.4	0.6	19	1	ABA76909	Pseudomonas aerugi
c 110	13.4	0.6	19	1	AAD28764	Oligonuccleotide p
c 111	13.2	0.6	18	1	AAZ39230	Probe for typing H
c 112	13.2	0.6	18	1	AAZ22366	Phosphorothioate a
113	13.2	0.6	18	1	AAA92684	PCR primer for hum
114	13.2	0.6	18	1	AAZ39594	Human cREL mRNA in
115	13.2	0.6	18	1	AAD15569	Brome mosaic virus
c 116	13.2	0.6	18	1	AAD15570	BMV 35kDa protein
117	13.2	0.6	18	1	AAF61531	Electrophoretic de
118	13.2	0.6	18	1	AAF61545	Electrophoretic de
119	13.2	0.6	18	1	AAD38648	Human Vbeta-Dbeta-
c 120	13.2	0.6	18	1	ABL31595	Human HLA genotypi
121	13	0.6	13	1	ABF71712	Oligonucleotide SE
c 122	13	0.6	13	1	ABF71713	Oligonucleotide SE
123	13	0.6	13	1	ABH29586	Oligonucleotide SE
c 124	13	0.6	13	1	ABH29587	Oligonucleotide SE
c 125	13	0.6	13	1	ABH49442	Oligonucleotide SE
126	13	0.6	13	1	ABH49443	Oligonucleotide SE
c 127	13	0.6	16	1	ABL31167	Human HLA genotypi
128	12.8	0.6	16	1	AAQ13905	Probe Y224 to N-ra
c 129	12.8	0.6	16	1	AAV49185	rb gene antisense
130	12.8	0.6	17	1	AAX63890	Rabbit stromelysin
131	12.8	0.6	17	1	AAA18678	Human TIE-2 substr
132	12.8	0.6	17	1	AAA18679	Human TIE-2 substr
133	12.8	0.6	17	1	AAF01818	Hammerhead ribozym
134	12.8	0.6	17	1	AAF01819	Hammerhead ribozym
135	12.8	0.6	17	1	AAF01833	Hammerhead ribozym
136	12.8	0.6	17	1	ABA81360	PSEN1 mutation cor
c 137	12.8	0.6	17	1	ABA81361	PSEN1 mutation cor
138	12.8	0.6	17	1	ABK02559	Human NOGO Amberzy
139	12.8	0.6	17	1	ABK03520	Human CD20 Zinzyme
140	12.8	0.6	17	1	ABK03521	Human CD20 Zinzyme
141	12.8	0.6	17	1	ABN07620	Human GDMLP-1 17-m
142	12.8	0.6	17	1	ABN07623	Human GDMLP-1 17-m
c 143	12.8	0.6	17	1	ABN10063	Human GDMLP-1 17-m
c 144	12.8	0.6	17	1	ABN10064	Human GDMLP-1 17-m
145	12.8	0.6	17	1	ABN10297	Human GDMLP-1 17-m
146	12.8	0.6	17	1	ABN10298	Human GDMLP-1 17-m
147	12.8	0.6	17	1	ABK17658	Human ERG hammerhe
148	12.8	0.6	17	1	ABK17659	Human ERG hammerhe
c 149	12.8	0.6	17	1	ABT39783	Tumour suppression
c 150	12.8	0.6	17	1	ABZ60910	Human K-Ras DNAzym
151	12.8	0.6	17	1	ABZ64995	Human HER2 DNAzyme
152	12.8	0.6	18	1	AAT11728	Polycystic kidney
c 153	12.8	0.6	18	1	AAZ22353	Phosphorothioate a
154	12.8	0.6	18	1	AAZ77396	Human biallelic ma
155	12.8	0.6	18	1	AAC64937	Human prostate-rel
156	12.8	0.6	18	1	AAA58717	Nucleotide sequenc
157	12.8	0.6	18	1	AAZ57739	Human G-alpha-12 a
c 158	12.8	0.6	18	1	AAZ35867	Human sentrin phos
159	12.8	0.6	18	1	AAS07164	Prostate-specific
160	12.8	0.6	18	1	AAF26684	Human Smad7 phosph
161	12.8	0.6	18	1	AAF64104	Primer #48. Homo
162	12.8	0.6	18	1	AAF64115	Primer #59. Homo
163	12.8	0.6	18	1	AAL49523	Human PS108 coding
164	12.8	0.6	18	1	ABQ65415	Human gene methyla
165	12.8	0.6	18	1	ABZ10447	Haematopoietic cel
c 166	12.8	0.6	18	1	ABZ10939	Haematopoietic cel
167	12.8	0.6	18	1	ABZ11023	Haematopoietic cel
c 168	12.8	0.6	18	1	ABZ11025	Haematopoietic cel
c 169	12.6	0.6	13	1	ABF08122	Oligonucleotide SE
170	12.6	0.6	13	1	ABF08123	Oligonucleotide SE
171	12.6	0.6	13	1	ABH41078	Oligonucleotide SE
c 172	12.6	0.6	13	1	ABH41079	Oligonucleotide SE
173	12.6	0.6	15	1	ABK47356	Human Angiotensin
c 174	12.6	0.6	18	1	AAQ49762	Membrane serine/th
c 175	12.6	0.6	18	1	AAT36073	Transforming growt
c 176	12.4	0.6	15	1	AAT54860	Mouse relA hammerh
c 177	12.4	0.6	15	1	AAX28314	PCR primer for Hum
178	12.4	0.6	15	1	AAF47694	IGFBP3 oligonucleo
179	12.4	0.6	15	1	AAF47695	IGFBP3 oligonucleo
c 180	12.4	0.6	15	1	AAF47735	IGFBP3 oligonucleo
c 181	12.4	0.6	15	1	AAF47738	IGFBP3 oligonucleo
c 182	12.4	0.6	15	1	AAL46568	Human FAPalpha spe
183	12.4	0.6	15	1	ABZ81747	Oligonucleotide HD
184	12.4	0.6	16	1	AAI64944	Human Creaml prote
185	12.4	0.6	17	1	AAX71584	Human KDR VEGF rec
c 186	12.4	0.6	17	1	AAQ03130	Oligo probe 7 desi
187	12.4	0.6	17	1	AAX69911	Human flt1 VEGF re
188	12.4	0.6	17	1	AAX69912	Human flt1 VEGF re
c 189	12.4	0.6	17	1	AAV95140	Canine IL-2 recept
190	12.4	0.6	17	1	AAA18677	Human TIE-2 substr
191	12.4	0.6	17	1	AAA20430	Integrin alpha 6 s
192	12.4	0.6	17	1	AAF01817	Hammerhead ribozym
193	12.4	0.6	17	1	AAF01832	Hammerhead ribozym
c 194	12.4	0.6	17	1	ABA78361	CFTR mutation corr
195	12.4	0.6	17	1	ABA78362	CFTR mutation corr
c 196	12.4	0.6	17	1	ABK26179	Increased starch p
197	12.4	0.6	17	1	ABK26180	Increased starch p
c 198	12.4	0.6	17	1	ABT34446	Tumour suppression
c 199	12.4	0.6	17	1	ABT35287	Tumour suppression
200	12.4	0.6	17	1	ABT36104	Tumour suppression
201	12.4	0.6	17	1	ABZ61087	Human K-Ras DNAzym
202	12.4	0.6	17	1	ABZ64996	Human HER2 DNAzyme
203	12.4	0.6	17	1	ABZ65413	Human HER2 DNAzyme
c 204	12.4	0.6	17	1	ABK55744	Human CLCA1 gene e
c 205	12.4	0.6	17	1	ABK55745	Human CLCA1 gene e
206	12.2	0.6	17	1	AAX71585	Human KDR VEGF rec
c 207	12.2	0.6	17	1	AAQ72657	Probe S02 for dist
c 208	12.2	0.6	17	1	AAT53528	Rat ICAM hammerhea
c 209	12.2	0.6	17	1	AAT53446	Rat ICAM hammerhea
c 210	12.2	0.6	17	1	AAT53691	Rat ICAM hammerhea
211	12.2	0.6	17	1	AAT81648	Human c-myb hammer
c 212	12.2	0.6	17	1	AAX75391	Mouse flt-1 VEGF r
c 213	12.2	0.6	17	1	AAX75191	Mouse flt-1 VEGF r
c 214	12.2	0.6	17	1	AAX73140	Mouse flk-1 VEGF r
c 215	12.2	0.6	17	1	AAX73127	Mouse flk-1 VEGF r
216	12.2	0.6	17	1	AAX71488	Human KDR VEGF rec
c 217	12.2	0.6	17	1	AAX69266	Human flt1 VEGF re
c 218	12.2	0.6	17	1	AAV97373	Human EGF-R target
c 219	12.2	0.6	17	1	AAV30347	Oligomer p17rpst u
c 220	12.2	0.6	17	1	AAA23134	Integrin subunit b
c 221	12.2	0.6	17	1	AAA23135	Integrin subunit b
c 222	12.2	0.6	17	1	AAV93558	Human B-raf substr
223	12.2	0.6	17	1	AAV91167	Human C-raf target
224	12.2	0.6	17	1	AAF01982	Hammerhead ribozym
c 225	12.2	0.6	17	1	AAF02395	Hammerhead ribozym
226	12.2	0.6	17	1	AAF03398	Hammerhead ribozym
c 227	12.2	0.6	17	1	ABK02373	Human NOGO Amberzy
228	12.2	0.6	17	1	ABK02475	Human NOGO Amberzy
c 229	12.2	0.6	17	1	ABV80679	Human HTPL scannin
230	12.2	0.6	17	1	ABS74966	Human PAPP-Ea asso
231	12.2	0.6	17	1	ABV89526	Human POSHL1 scann
232	12.2	0.6	17	1	ABV89528	Human POSHL1 scann
c 233	12.2	0.6	17	1	ABV89900	Human POSHL1 scann
c 234	12.2	0.6	17	1	ABV89901	Human POSHL1 scann
c 235	12.2	0.6	17	1	ABK55743	Human CLCA1 gene e
c 236	12.2	0.6	17	1	ABK56206	Human CLCA1 gene e
c 237	12.2	0.6	17	1	ABN02298	Human GDMLP-1 17-m
c 238	12.2	0.6	17	1	ABN02299	Human GDMLP-1 17-m
239	12.2	0.6	17	1	ABN07200	Human GDMLP-1 17-m
c 240	12.2	0.6	17	1	ABN10062	Human GDMLP-1 17-m
c 241	12.2	0.6	17	1	ABK17639	Human ERG hammerhe
c 242	12.2	0.6	17	1	ABL31434	Human HLA genotypi
243	12.2	0.6	17	1	ABT36249	Tumour suppression
244	12.2	0.6	17	1	ABT39265	Tumour suppression
c 245	12.2	0.6	17	1	ABT39393	Tumour suppression
246	12.2	0.6	17	1	ABZ61846	Human H-Ras DNAzym
c 247	12	0.6	12	1	ABH72675	Oligonucleotide pr
248	12	0.6	12	1	ABH77043	Oligonucleotide pr
c 249	12	0.6	12	1	ABH80023	Oligonucleotide pr
250	12	0.6	12	1	ABH83219	Oligonucleotide pr
251	12	0.6	12	1	ABH84861	Oligonucleotide pr
c 252	12	0.6	12	1	ABI03168	Oligonucleotide pr

	253	12	0.6	12	1	ABI06313	Oligonucleotide pr
c	254	12	0.6	12	1	ABI15694	Oligonucleotide pr
	255	12	0.6	12	1	ABI18418	Oligonucleotide pr
c	256	12	0.6	12	1	ABI19228	Oligonucleotide pr
	257	12	0.6	12	1	ABI19662	Oligonucleotide pr
c	258	12	0.6	12	1	ABI24889	Oligonucleotide pr
c	259	12	0.6	12	1	ABI27970	Oligonucleotide pr
	260	12	0.6	12	1	ABI30130	Oligonucleotide pr
	261	12	0.6	12	1	ABI34101	Oligonucleotide pr
	262	12	0.6	12	1	ABI43327	Oligonucleotide pr
	263	12	0.6	12	1	ABI54168	Oligonucleotide pr
	264	12	0.6	12	1	ABI61742	Oligonucleotide pr
	265	12	0.6	12	1	ABI72654	Oligonucleotide pr
c	266	12	0.6	12	1	ABI81677	Oligonucleotide pr
	267	12	0.6	13	1	ABC04190	Oligonucleotide SE
c	268	12	0.6	13	1	ABC04191	Oligonucleotide SE
	269	12	0.6	13	1	ABC59578	Oligonucleotide SE
c	270	12	0.6	13	1	ABC59579	Oligonucleotide SE
	271	12	0.6	13	1	ABC64758	Oligonucleotide SE
c	272	12	0.6	13	1	ABC64759	Oligonucleotide SE
	273	12	0.6	13	1	ABC67092	Oligonucleotide SE
c	274	12	0.6	13	1	ABC67093	Oligonucleotide SE
	275	12	0.6	13	1	ABC68824	Oligonucleotide SE
c	276	12	0.6	13	1	ABC68825	Oligonucleotide SE
c	277	12	0.6	13	1	ABC82886	Oligonucleotide SE
	278	12	0.6	13	1	ABC82887	Oligonucleotide SE
	279	12	0.6	13	1	ABF10676	Oligonucleotide SE
c	280	12	0.6	13	1	ABF10677	Oligonucleotide SE
c	281	12	0.6	13	1	ABF16574	Oligonucleotide SE
	282	12	0.6	13	1	ABF16575	Oligonucleotide SE
	283	12	0.6	13	1	ABF40132	Oligonucleotide SE
c	284	12	0.6	13	1	ABF40133	Oligonucleotide SE
	285	12	0.6	13	1	ABF55396	Oligonucleotide SE
c	286	12	0.6	13	1	ABF55397	Oligonucleotide SE
c	287	12	0.6	13	1	ABF80938	Oligonucleotide SE
	288	12	0.6	13	1	ABF80939	Oligonucleotide SE
c	289	12	0.6	13	1	ABH09848	Oligonucleotide SE
	290	12	0.6	13	1	ABH09849	Oligonucleotide SE
	291	12	0.6	13	1	ABH54608	Oligonucleotide SE
c	292	12	0.6	13	1	ABH54609	Oligonucleotide SE
	293	12	0.6	13	1	ABH57770	Oligonucleotide SE
c	294	12	0.6	13	1	ABH57771	Oligonucleotide SE
	295	12	0.6	13	1	ABH59494	Oligonucleotide SE
c	296	12	0.6	13	1	ABH59495	Oligonucleotide SE
	297	12	0.6	13	1	ABH61350	Oligonucleotide SE
c	298	12	0.6	13	1	ABH61351	Oligonucleotide SE
	299	12	0.6	13	1	ABH63162	Oligonucleotide SE
c	300	12	0.6	13	1	ABH63163	Oligonucleotide SE
	301	12	0.6	13	1	ABH63288	Oligonucleotide SE
c	302	12	0.6	13	1	ABH63289	Oligonucleotide SE
	303	12	0.6	14	1	AAH74113	Primer #10 used in
	304	12	0.6	15	1	AAH74111	Primer #8 used in
	305	12	0.6	15	1	AAF98066	Human IGERA allele
	306	12	0.6	15	1	AAF98068	Human IGERA allele
c	307	12	0.6	15	1	ABN80593	Human P450(cytochr
	308	12	0.6	15	1	ABK55517	Selectin L Lymphoc
	309	12	0.6	16	1	AAD31906	Borrelia burgdorfe
c	310	12	0.6	17	1	AAX75298	Mouse flt-1 VEGF r
c	311	12	0.6	17	1	ABN02300	Human GDMLP-1 17-m
c	312	12	0.6	17	1	ABN02301	Human GDMLP-1 17-m
c	313	12	0.6	17	1	ABN02302	Human GDMLP-1 17-m
c	314	12	0.6	17	1	ABN02303	Human GDMLP-1 17-m
c	315	12	0.6	17	1	ABN02304	Human GDMLP-1 17-m
c	316	12	0.6	17	1	ABT37519	Tumour suppression
c	317	12	0.6	17	1	ABT38615	Tumour suppression
	318	11.8	0.6	15	1	AAT55162	Human relA hammerh
c	319	11.8	0.6	15	1	AAX66308	Mouse B7-2 hammerh
c	320	11.8	0.6	15	1	AAX66309	Mouse B7-2 hammerh
c	321	11.8	0.6	15	1	AAX66233	Mouse B7-2 hammerh
	322	11.8	0.6	15	1	AAV49184	rb gene antisense
c	323	11.8	0.6	15	1	AAV49184	rb gene antisense
	324	11.8	0.6	15	1	AAX31435	Tag sequence of a
	325	11.8	0.6	15	1	AAX30954	Tag sequence of a
	326	11.8	0.6	15	1	AAX14674	Triple helix formi
c	327	11.8	0.6	15	1	AAZ60708	Nucleotide sequenc
c	328	11.8	0.6	15	1	AAD15782	Human interleukin
	329	11.8	0.6	15	1	AAH19694	Human transcriptio
c	330	11.8	0.6	15	1	AAF80936	PTGS2 allele speci
	331	11.8	0.6	15	1	AAF70327	Human DRD2 allele
c	332	11.8	0.6	15	1	AAF49687	IGF-I oligonucleot
c	333	11.8	0.6	15	1	AAF50723	IGF-I oligonucleot
c	334	11.8	0.6	15	1	AAF51599	IGF-I oligonucleot
c	335	11.8	0.6	15	1	AAF52308	IGF-I oligonucleot
	336	11.8	0.6	15	1	ABK14992	Potato protease in
	337	11.8	0.6	15	1	ABK14994	Potato protease in
	338	11.8	0.6	15	1	ABK31907	Human colon cancer
	339	11.8	0.6	15	1	ABK32389	Human colon cancer
c	340	11.8	0.6	15	1	ACA09934	Necrosis factor ka
c	341	11.8	0.6	16	1	AAQ68042	Probe for HCV geno
c	342	11.8	0.6	16	1	AAQ68049	Probe for HCV geno
	343	11.8	0.6	16	1	AAV49185	rb gene antisense
c	344	11.8	0.6	16	1	AAA50155	PCR primer ZC19676
	345	11.8	0.6	16	1	AAD31911	Rickettsia prowaze
	346	11.6	0.6	13	1	ABC07964	Oligonucleotide SE
c	347	11.6	0.6	13	1	ABC07965	Oligonucleotide SE
	348	11.6	0.6	13	1	ABC52584	Oligonucleotide SE
c	349	11.6	0.6	13	1	ABC52585	Oligonucleotide SE
c	350	11.6	0.6	15	1	ABL45742	Human MMP13 gene a
	351	11.4	0.5	13	1	ABC01932	Oligonucleotide SE
c	352	11.4	0.5	13	1	ABC01933	Oligonucleotide SE
	353	11.4	0.5	13	1	ABC09790	Oligonucleotide SE
c	354	11.4	0.5	13	1	ABC09791	Oligonucleotide SE
	355	11.4	0.5	13	1	ABC10178	Oligonucleotide SE
c	356	11.4	0.5	13	1	ABC10179	Oligonucleotide SE
	357	11.4	0.5	13	1	ABC19330	Oligonucleotide SE
c	358	11.4	0.5	13	1	ABC19331	Oligonucleotide SE
	359	11.4	0.5	13	1	ABC25676	Oligonucleotide SE
c	360	11.4	0.5	13	1	ABC25676	Oligonucleotide SE
	361	11.4	0.5	13	1	ABC25677	Oligonucleotide SE
c	362	11.4	0.5	13	1	ABC25677	Oligonucleotide SE
	363	11.4	0.5	13	1	ABC26112	Oligonucleotide SE
c	364	11.4	0.5	13	1	ABC26113	Oligonucleotide SE
	365	11.4	0.5	13	1	ABC28388	Oligonucleotide SE
c	366	11.4	0.5	13	1	ABC28389	Oligonucleotide SE
	367	11.4	0.5	13	1	ABC28810	Oligonucleotide SE
c	368	11.4	0.5	13	1	ABC28811	Oligonucleotide SE
	369	11.4	0.5	13	1	ABC31996	Oligonucleotide SE
c	370	11.4	0.5	13	1	ABC31997	Oligonucleotide SE
	371	11.4	0.5	13	1	ABC32824	Oligonucleotide SE
c	372	11.4	0.5	13	1	ABC32825	Oligonucleotide SE
	373	11.4	0.5	13	1	ABC33322	Oligonucleotide SE
c	374	11.4	0.5	13	1	ABC33323	Oligonucleotide SE
	375	11.4	0.5	13	1	ABC33324	Oligonucleotide SE
c	376	11.4	0.5	13	1	ABC33325	Oligonucleotide SE
	377	11.4	0.5	13	1	ABC34314	Oligonucleotide SE
c	378	11.4	0.5	13	1	ABC34315	Oligonucleotide SE
	379	11.4	0.5	13	1	ABC36822	Oligonucleotide SE
c	380	11.4	0.5	13	1	ABC36823	Oligonucleotide SE
	381	11.4	0.5	13	1	ABC39158	Oligonucleotide SE
c	382	11.4	0.5	13	1	ABC39159	Oligonucleotide SE
c	383	11.4	0.5	13	1	ABC39592	Oligonucleotide SE
	384	11.4	0.5	13	1	ABC39593	Oligonucleotide SE
	385	11.4	0.5	13	1	ABC45652	Oligonucleotide SE
c	386	11.4	0.5	13	1	ABC45653	Oligonucleotide SE
	387	11.4	0.5	13	1	ABC48782	Oligonucleotide SE
c	388	11.4	0.5	13	1	ABC48783	Oligonucleotide SE
	389	11.4	0.5	13	1	ABC74324	Oligonucleotide SE
c	390	11.4	0.5	13	1	ABC74325	Oligonucleotide SE
	391	11.4	0.5	13	1	ABC78332	Oligonucleotide SE
c	392	11.4	0.5	13	1	ABC78333	Oligonucleotide SE
	393	11.4	0.5	13	1	ABC81828	Oligonucleotide SE
c	394	11.4	0.5	13	1	ABC81829	Oligonucleotide SE
c	395	11.4	0.5	13	1	ABC85228	Oligonucleotide SE
	396	11.4	0.5	13	1	ABC85229	Oligonucleotide SE
	397	11.4	0.5	13	1	ABC87324	Oligonucleotide SE
c	398	11.4	0.5	13	1	ABC87325	Oligonucleotide SE

c 399	11.4	0.5	13	1	ABC89774	Oligonucleotide SE
400	11.4	0.5	13	1	ABC89775	Oligonucleotide SE
401	11.4	0.5	13	1	ABF04322	Oligonucleotide SE
c 402	11.4	0.5	13	1	ABF04323	Oligonucleotide SE
403	11.4	0.5	13	1	ABF05662	Oligonucleotide SE
c 404	11.4	0.5	13	1	ABF05663	Oligonucleotide SE
405	11.4	0.5	13	1	ABF08232	Oligonucleotide SE
c 406	11.4	0.5	13	1	ABF08233	Oligonucleotide SE
407	11.4	0.5	13	1	ABF14006	Oligonucleotide SE
c 408	11.4	0.5	13	1	ABF14007	Oligonucleotide SE
409	11.4	0.5	13	1	ABF14058	Oligonucleotide SE
c 410	11.4	0.5	13	1	ABF14059	Oligonucleotide SE
411	11.4	0.5	13	1	ABF15356	Oligonucleotide SE
c 412	11.4	0.5	13	1	ABF15357	Oligonucleotide SE
c 413	11.4	0.5	13	1	ABF17146	Oligonucleotide SE
414	11.4	0.5	13	1	ABF17147	Oligonucleotide SE
c 415	11.4	0.5	13	1	ABF19870	Oligonucleotide SE
416	11.4	0.5	13	1	ABF19871	Oligonucleotide SE
417	11.4	0.5	13	1	ABF22704	Oligonucleotide SE
c 418	11.4	0.5	13	1	ABF22705	Oligonucleotide SE
419	11.4	0.5	13	1	ABF23282	Oligonucleotide SE
c 420	11.4	0.5	13	1	ABF23283	Oligonucleotide SE
421	11.4	0.5	13	1	ABF23290	Oligonucleotide SE
c 422	11.4	0.5	13	1	ABF23291	Oligonucleotide SE
423	11.4	0.5	13	1	ABF26076	Oligonucleotide SE
c 424	11.4	0.5	13	1	ABF26077	Oligonucleotide SE
425	11.4	0.5	13	1	ABF28362	Oligonucleotide SE
c 426	11.4	0.5	13	1	ABF28363	Oligonucleotide SE
427	11.4	0.5	13	1	ABF29980	Oligonucleotide SE
c 428	11.4	0.5	13	1	ABF29981	Oligonucleotide SE
429	11.4	0.5	13	1	ABF29982	Oligonucleotide SE
c 430	11.4	0.5	13	1	ABF29983	Oligonucleotide SE
431	11.4	0.5	13	1	ABF34758	Oligonucleotide SE
c 432	11.4	0.5	13	1	ABF34759	Oligonucleotide SE
433	11.4	0.5	13	1	ABF35028	Oligonucleotide SE
c 434	11.4	0.5	13	1	ABF35029	Oligonucleotide SE
435	11.4	0.5	13	1	ABF42176	Oligonucleotide SE
c 436	11.4	0.5	13	1	ABF42177	Oligonucleotide SE
437	11.4	0.5	13	1	ABF47338	Oligonucleotide SE
c 438	11.4	0.5	13	1	ABF47339	Oligonucleotide SE
439	11.4	0.5	13	1	ABF47992	Oligonucleotide SE
c 440	11.4	0.5	13	1	ABF47993	Oligonucleotide SE
441	11.4	0.5	13	1	ABF50390	Oligonucleotide SE
c 442	11.4	0.5	13	1	ABF50391	Oligonucleotide SE
c 443	11.4	0.5	13	1	ABF53890	Oligonucleotide SE
444	11.4	0.5	13	1	ABF53891	Oligonucleotide SE
c 445	11.4	0.5	13	1	ABF62728	Oligonucleotide SE
446	11.4	0.5	13	1	ABF62729	Oligonucleotide SE
c 447	11.4	0.5	13	1	ABF64646	Oligonucleotide SE
448	11.4	0.5	13	1	ABF64647	Oligonucleotide SE
449	11.4	0.5	13	1	ABF69774	Oligonucleotide SE
c 450	11.4	0.5	13	1	ABF69775	Oligonucleotide SE
451	11.4	0.5	13	1	ABF71056	Oligonucleotide SE
c 452	11.4	0.5	13	1	ABF71056	Oligonucleotide SE
453	11.4	0.5	13	1	ABF71057	Oligonucleotide SE
c 454	11.4	0.5	13	1	ABF71057	Oligonucleotide SE
455	11.4	0.5	13	1	ABF71710	Oligonucleotide SE
c 456	11.4	0.5	13	1	ABF71711	Oligonucleotide SE
c 457	11.4	0.5	13	1	ABF72518	Oligonucleotide SE
458	11.4	0.5	13	1	ABF72519	Oligonucleotide SE
459	11.4	0.5	13	1	ABF74164	Oligonucleotide SE
c 460	11.4	0.5	13	1	ABF74165	Oligonucleotide SE
461	11.4	0.5	13	1	ABF75878	Oligonucleotide SE
c 462	11.4	0.5	13	1	ABF75879	Oligonucleotide SE
463	11.4	0.5	13	1	ABF79976	Oligonucleotide SE
c 464	11.4	0.5	13	1	ABF79977	Oligonucleotide SE
465	11.4	0.5	13	1	ABF80140	Oligonucleotide SE
c 466	11.4	0.5	13	1	ABF80141	Oligonucleotide SE
467	11.4	0.5	13	1	ABF83116	Oligonucleotide SE
c 468	11.4	0.5	13	1	ABF83117	Oligonucleotide SE
469	11.4	0.5	13	1	ABF86368	Oligonucleotide SE
c 470	11.4	0.5	13	1	ABF86369	Oligonucleotide SE
c 471	11.4	0.5	13	1	ABF89976	Oligonucleotide SE
472	11.4	0.5	13	1	ABF89977	Oligonucleotide SE
473	11.4	0.5	13	1	ABF94864	Oligonucleotide SE
c 474	11.4	0.5	13	1	ABF94865	Oligonucleotide SE
475	11.4	0.5	13	1	ABF99196	Oligonucleotide SE
c 476	11.4	0.5	13	1	ABF99197	Oligonucleotide SE
477	11.4	0.5	13	1	ABH00962	Oligonucleotide SE
c 478	11.4	0.5	13	1	ABH00963	Oligonucleotide SE
479	11.4	0.5	13	1	ABH05592	Oligonucleotide SE
c 480	11.4	0.5	13	1	ABH05593	Oligonucleotide SE
481	11.4	0.5	13	1	ABH11518	Oligonucleotide SE
c 482	11.4	0.5	13	1	ABH11519	Oligonucleotide SE
483	11.4	0.5	13	1	ABH11916	Oligonucleotide SE
c 484	11.4	0.5	13	1	ABH11917	Oligonucleotide SE
485	11.4	0.5	13	1	ABH24044	Oligonucleotide SE
c 486	11.4	0.5	13	1	ABH24045	Oligonucleotide SE
c 487	11.4	0.5	13	1	ABH24962	Oligonucleotide SE
488	11.4	0.5	13	1	ABH24963	Oligonucleotide SE
489	11.4	0.5	13	1	ABH25744	Oligonucleotide SE
c 490	11.4	0.5	13	1	ABH25745	Oligonucleotide SE
491	11.4	0.5	13	1	ABH27588	Oligonucleotide SE
c 492	11.4	0.5	13	1	ABH27589	Oligonucleotide SE
493	11.4	0.5	13	1	ABH29234	Oligonucleotide SE
c 494	11.4	0.5	13	1	ABH29235	Oligonucleotide SE
495	11.4	0.5	13	1	ABH29584	Oligonucleotide SE
c 496	11.4	0.5	13	1	ABH29585	Oligonucleotide SE
497	11.4	0.5	13	1	ABH42552	Oligonucleotide SE
c 498	11.4	0.5	13	1	ABH42553	Oligonucleotide SE
499	11.4	0.5	13	1	ABH44770	Oligonucleotide SE
c 500	11.4	0.5	13	1	ABH44771	Oligonucleotide SE
501	11.4	0.5	13	1	ABH44904	Oligonucleotide SE
c 502	11.4	0.5	13	1	ABH44905	Oligonucleotide SE
503	11.4	0.5	13	1	ABH45228	Oligonucleotide SE
c 504	11.4	0.5	13	1	ABH45229	Oligonucleotide SE
c 505	11.4	0.5	13	1	ABH49444	Oligonucleotide SE
506	11.4	0.5	13	1	ABH49445	Oligonucleotide SE
507	11.4	0.5	13	1	ABH53238	Oligonucleotide SE
c 508	11.4	0.5	13	1	ABH53239	Oligonucleotide SE
509	11.4	0.5	13	1	ABH53240	Oligonucleotide SE
c 510	11.4	0.5	13	1	ABH53241	Oligonucleotide SE
c 511	11.4	0.5	13	1	ABH54656	Oligonucleotide SE
512	11.4	0.5	13	1	ABH54657	Oligonucleotide SE
513	11.4	0.5	13	1	ABH56978	Oligonucleotide SE
c 514	11.4	0.5	13	1	ABH56979	Oligonucleotide SE
515	11.4	0.5	13	1	ABH57308	Oligonucleotide SE
c 516	11.4	0.5	13	1	ABH57309	Oligonucleotide SE
517	11.4	0.5	13	1	ABH60792	Oligonucleotide SE
c 518	11.4	0.5	13	1	ABH60793	Oligonucleotide SE
519	11.4	0.5	13	1	ABH61306	Oligonucleotide SE
c 520	11.4	0.5	13	1	ABH61307	Oligonucleotide SE
521	11.4	0.5	13	1	ABH61504	Oligonucleotide SE
c 522	11.4	0.5	13	1	ABH61505	Oligonucleotide SE
523	11.4	0.5	13	1	ABH61628	Oligonucleotide SE
c 524	11.4	0.5	13	1	ABH61629	Oligonucleotide SE
525	11.4	0.5	13	1	ABH61864	Oligonucleotide SE
c 526	11.4	0.5	13	1	ABH61865	Oligonucleotide SE
c 527	11.4	0.5	13	1	ABH63998	Oligonucleotide SE
528	11.4	0.5	13	1	ABH63999	Oligonucleotide SE
529	11.4	0.5	13	1	ABH65722	Oligonucleotide SE
c 530	11.4	0.5	13	1	ABH65723	Oligonucleotide SE
531	11.4	0.5	13	1	AAI71016	HNF-6 hepatic nucl
532	11.4	0.5	14	1	AAQ78380	Antisense oligonuc
533	11.4	0.5	14	1	AAA26158	Oestrogen receptor
534	11.4	0.5	14	1	AAA26165	Oestrogen receptor
535	11.4	0.5	14	1	AAH91790	Human inflammatory
c 536	11.4	0.5	14	1	AAH45061	Oligonucleotide #1
c 537	11.4	0.5	15	1	AAT52286	Mouse ICAM hammerh
c 538	11.4	0.5	15	1	AAX66232	Mouse B7-2 hammerh
c 539	11.4	0.5	15	1	AAX64792	Human B7-1 hammerh
c 540	11.4	0.5	15	1	AAX64769	Human B7-1 hammerh
c 541	11.4	0.5	15	1	AAX66585	Human CD40 hammerh
c 542	11.4	0.5	15	1	AAT38818	Probe 3 used to id
c 543	11.4	0.5	15	1	AAV48505	p53 gene antisense
c 544	11.4	0.5	15	1	AAV02004	Probe used to dete

c	545	11.4	0.5	15	1	AAV01985	Probe from a tiled
c	546	11.4	0.5	15	1	AAX81361	PCR primer used to
	547	11.4	0.5	15	1	ABA81574	Human phospholipid
	548	11.4	0.5	15	1	AAS57212	Human CHRNB2 allel
c	549	11.4	0.5	15	1	AAD15745	Human interleukin
c	550	11.4	0.5	15	1	AAH19399	Oligonucleotide #3
	551	11.4	0.5	15	1	AAF98043	Human IGERA allele
	552	11.4	0.5	15	1	AAF47693	IGFBP3 oligonucleo
	553	11.4	0.5	15	1	AAF47696	IGFBP3 oligonucleo
c	554	11.4	0.5	15	1	AAF47734	IGFBP3 oligonucleo
c	555	11.4	0.5	15	1	AAF47739	IGFBP3 oligonucleo
c	556	11.4	0.5	15	1	AAF52306	IGF-I oligonucleot
c	557	11.4	0.5	15	1	AAF52307	IGF-I oligonucleot
c	558	11.4	0.5	15	1	AAD43643	Human interleukin
c	559	11.4	0.5	15	1	ABK92613	ASO primer #11 to
	560	11.4	0.5	15	1	ABQ72218	Human CYP2D6 allel
	561	11.4	0.5	15	1	ABK81906	Human CYP27A1 gene
	562	11.4	0.5	15	1	ABN87935	Human GSR allele s
	563	11.4	0.5	15	1	ABL60192	Human MUC1 PCR pri
	564	11.4	0.5	15	1	ABL52084	Human PER1 allele
c	565	11.4	0.5	15	1	ABL53008	Oligonucleotide #3
c	566	11.4	0.5	15	1	AAD25869	ASO primer #5 to d
	567	11.4	0.5	15	1	AAS94586	Human PLTP gene al
c	568	11.4	0.5	15	1	AAS95495	Human HSD3B2 gene
c	569	11.4	0.5	16	1	AAD31906	Borrelia burgdorfe
c	570	11.4	0.5	16	1	AAT36438	Human papillomavir
	571	11.4	0.5	16	1	AAV33896	PCR primer #6 for
	572	11.4	0.5	16	1	AAI67032	Human PLSCR1 intro
c	573	11.4	0.5	16	1	ABL31149	Human HLA genotypi
c	574	11.4	0.5	16	1	ABL31163	Human HLA genotypi
c	575	11.4	0.5	16	1	ABL31171	Human HLA genotypi
c	576	11.4	0.5	16	1	AAQ65750	Type II procollage
	577	11.4	0.5	17	1	AAA23134	Integrin subunit b
	578	11.4	0.5	17	1	AAA23135	Integrin subunit b
c	579	11.2	0.5	16	1	AAD31911	Rickettsia prowaze
c	580	11.2	0.5	16	1	AAQ64914	Antisense oligonuc
	581	11.2	0.5	16	1	AAT85835	Mutated CRE/CRE si
	582	11.2	0.5	16	1	AAT71067	Human CD44 gene an
c	583	11.2	0.5	16	1	AAV49016	rb gene antisense
c	584	11.2	0.5	16	1	AAV48749	ErbB-2 gene antise
	585	11.2	0.5	16	1	AAA04899	Tenascin-C phospho
c	586	11.2	0.5	16	1	AAS56917	Validation ribozym
	587	11.2	0.5	16	1	AAD15571	Brome mosaic virus
c	588	11.2	0.5	16	1	AAD15572	BMV 35kDa protein
	589	11.2	0.5	16	1	AAH48051	Oligonucleotide #5
	590	11.2	0.5	16	1	ABZ34454	HIV-1 reverse tran
	591	11.2	0.5	16	1	ABZ34518	HIV-1 reverse tran
c	592	11.2	0.5	16	1	ABQ78240	Nucleotide sequenc
	593	11.2	0.5	16	1	ABL95953	Probe #30 for assa
c	594	11.2	0.5	16	1	ABL95959	Probe #36 for assa
c	595	11.2	0.5	16	1	ABL31691	Human HLA genotypi
c	596	11.2	0.5	16	1	AAS17771	Human chimaeric an
	597	11.2	0.5	16	1	AAL54229	RNAP recognition a
c	598	11.2	0.5	16	1	ABX10444	Receptor-associate
c	599	11.2	0.5	17	1	AAX69911	Human flt1 VEGF re
c	600	11.2	0.5	17	1	AAX69912	Human flt1 VEGF re
	601	11.2	0.5	18	1	AAZ70085	Human biallelic ma
	602	11.2	0.5	19	1	AAD28764	Oligonuccleotide p
	603	11.2	0.5	20	1	AAD49341	Mouse phospholipid
	604	11.2	0.5	20	1	AAD49342	Mouse phospholipid
	605	11.2	0.5	20	1	AAX97424	Primer used to amp
	606	11.2	0.5	20	1	AAD49343	Mouse phospholipid
	607	11	0.5	20	1	AAD49273	Human phospholipid
c	608	10.8	0.5	15	1	AAX14674	Triple helix formi
	609	10.8	0.5	17	1	AAX73140	Mouse flk-1 VEGF r
c	610	10.6	0.5	17	1	ABN10298	Human GDMLP-1 17-m
	611	10.6	0.5	17	1	AAQ03130	Oligo probe 7 desi
	612	10.6	0.5	17	1	AAT53528	Rat ICAM hammerhea
	613	10.6	0.5	17	1	AAT53446	Rat ICAM hammerhea
	614	10.6	0.5	17	1	AAT53691	Rat ICAM hammerhea
	615	10.6	0.5	18	1	ABZ81757	Huntington's disea
c	616	10.4	0.5	12	1	ABI19662	Oligonucleotide pr
	617	10.4	0.5	13	1	ABF08122	Oligonucleotide SE
c	618	10.4	0.5	13	1	ABF08123	Oligonucleotide SE
	619	10.4	0.5	13	1	ABF16574	Oligonucleotide SE
c	620	10.4	0.5	13	1	ABF16575	Oligonucleotide SE
c	621	10.4	0.5	13	1	ABH24044	Oligonucleotide SE
	622	10.4	0.5	13	1	ABH24045	Oligonucleotide SE
	623	10.4	0.5	17	1	ABT34374	Tumour suppression
	624	10.4	0.5	17	1	AAV97373	Human EGF-R target
c	625	10.4	0.5	19	1	AAA84266	Cyclin D1 ribozyme
c	626	10.4	0.5	19	1	AAH59428	Cyclin D1 ribozyme
	627	10.4	0.5	20	1	AAD49270	Human phospholipid
c	628	10.4	0.5	20	1	AAS09015	Human SAP140 intro
	629	10.2	0.5	16	1	AAQ68049	Probe for HCV geno
	630	10.2	0.5	17	1	ABZ60910	Human K-Ras DNAzym
	631	10.2	0.5	20	1	AAZ23719	M. fossilis Cytb p
	632	10	0.5	17	1	AAX75191	Mouse flt-1 VEGF r
	633	10	0.5	17	1	ABV80679	Human HTPL scannin
c	634	10	0.5	18	1	AAZ70132	Human biallelic ma
c	635	10	0.5	19	1	AAZ32742	Primer T7 variant.
c	636	10	0.5	19	1	ABQ81733	Neospora caninum S
c	637	10	0.5	19	1	ABQ82081	Neospora caninum S
c	638	10	0.5	19	1	ABA00112	Primer NCSAG1320.
	639	10	0.5	20	1	AAD49271	Human phospholipid
c	640	10	0.5	20	1	AAT29770	Barley betaine ald
c	641	10	0.5	20	1	AAH39830	SNP specific lower
	642	10	0.5	20	1	AAD49340	Mouse phospholipid
	643	10	0.5	20	1	ABV76077	Aspergillus niger
	644	9.8	0.5	13	1	ABC39592	Oligonucleotide SE
c	645	9.8	0.5	13	1	ABC39593	Oligonucleotide SE
c	646	9.8	0.5	13	1	ABF05662	Oligonucleotide SE
	647	9.8	0.5	13	1	ABF05663	Oligonucleotide SE
	648	9.8	0.5	13	1	ABF17146	Oligonucleotide SE
c	649	9.8	0.5	13	1	ABF17147	Oligonucleotide SE
c	650	9.8	0.5	13	1	ABF26076	Oligonucleotide SE
	651	9.8	0.5	13	1	ABF26077	Oligonucleotide SE
c	652	9.8	0.5	13	1	ABF47338	Oligonucleotide SE
	653	9.8	0.5	13	1	ABF47339	Oligonucleotide SE
	654	9.8	0.5	13	1	ABF72518	Oligonucleotide SE
c	655	9.8	0.5	13	1	ABF72519	Oligonucleotide SE
c	656	9.8	0.5	13	1	ABF75878	Oligonucleotide SE
	657	9.8	0.5	13	1	ABF75879	Oligonucleotide SE
c	58	9.8	0.5	13	1	ABH27588	Oligonucleotide SE
	659	9.8	0.5	13	1	ABH27589	Oligonucleotide SE
c	660	9.8	0.5	13	1	ABH53238	Oligonucleotide SE
	661	9.8	0.5	13	1	ABH53239	Oligonucleotide SE
c	662	9.8	0.5	15	1	ABK55517	Selectin L Lymphoc
	663	9.8	0.5	15	1	AAD15782	Human interleukin
	664	9.8	0.5	15	1	AAD15745	Human interleukin
	665	9.8	0.5	15	1	ABK92613	ASO primer #11 to
	666	9.8	0.5	16	1	ABL31167	Human HLA genotypi
c	667	9.8	0.5	16	1	AAI67032	Human PLSCR1 intro
c	668	9.8	0.5	16	1	ABZ34454	HIV-1 reverse tran
c	669	9.8	0.5	16	1	ABZ34518	HIV-1 reverse tran
c	670	9.8	0.5	18	1	AAF61531	Electrophoretic de

ALIGNMENTS

RESULT 1
AAD49257/c
ID AAD49257 standard; DNA; 20 BP.
XX
AC AAD49257;
XX
DT 07-MAR-2003 (first entry)
XX
DE Human phospholipid scramblase I antisense oligo, ISIS #120468.
XX
KW Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW ss.
XX
OS Homo sapiens.

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OS   Synthetic.
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FH   Key             Location/Qualifiers
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FT                   /note= "Phosphorothioate backbone"
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XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        652 GAACAGCTTTGGACAGAGGG 671
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Db         20 GAACAGCTTTGGACAGAGGG 1


RESULT 2
AAD49258/c
ID   AAD49258 standard; DNA; 20 BP.
XX
AC   AAD49258;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120469.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
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FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
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FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   2
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FT   modified_base   5
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XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
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CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 5 G; 4 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        699 GCTGTACCCGAAATTGCTGT 718
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Db         20 GCTGTACCCGAAATTGCTGT 1


RESULT 3
AAD49259/c
ID   AAD49259 standard; DNA; 20 BP.
XX
AC   AAD49259;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120470.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
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FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
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FT   modified_base   5..6
FT                   /*tag=  d
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FT   modified_base   8
FT                   /*tag=  e
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XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 8 A; 3 C; 4 G; 5 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        730 ACCTTTTACCTTGAGGATTA 749
              ||||||||||||||||||||
Db         20 ACCTTTTACCTTGAGGATTA 1


RESULT 4
AAD49260/c
ID   AAD49260 standard; DNA; 20 BP.
XX
AC   AAD49260;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120471.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
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FT   modified_base   6..7
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PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
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PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 9 A; 3 C; 4 G; 4 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        731 CCTTTTACCTTGAGGATTAT 750
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Db         20 CCTTTTACCTTGAGGATTAT 1


RESULT 5
AAD49261/c
ID   AAD49261 standard; DNA; 20 BP.
XX
AC   AAD49261;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120472.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
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FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16..20
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FT                    /*tag=  d
FT                    /mod_base= m5c
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XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 2 G; 8 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        753 ATAATATGGGTCAAGAAGTC 772
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Db         20 ATAATATGGGTCAAGAAGTC 1


RESULT 6
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ID   AAD49262 standard; DNA; 20 BP.
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AC   AAD49262;
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DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120473.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
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FH   Key             Location/Qualifiers
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FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
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FT                   /note= "2'methoxyethyl nucleotides"
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XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        814 TCCCTGCTGCCTTCAGGAGA 833
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Db         20 TCCCTGCTGCCTTCAGGAGA 1


RESULT 7
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ID   AAD49263 standard; DNA; 20 BP.
XX
AC   AAD49263;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120474.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
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FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
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FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   5
FT                   /*tag= d
FT                   /mod_base= m5c
FT   modified_base   14
FT                   /*tag= e
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag= f
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag= g
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer -
XX
PS   Claim 3; Page 76; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
```

```
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        830 GAGATAGAAATCCAAGCTCC 849
              ||||||||||||||||||||
Db         20 GAGATAGAAATCCAAGCTCC 1


RESULT 8
AAD49264/c
ID   AAD49264 standard; DNA; 20 BP.
XX
AC   AAD49264;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120475.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   2..3
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   12
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        837 AAATCCAAGCTCCTCCTGGT 856
              ||||||||||||||||||||
Db         20 AAATCCAAGCTCCTCCTGGT 1


RESULT 9
AAD49265/c
ID   AAD49265 standard; DNA; 20 BP.
XX
AC   AAD49265;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120476.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   6..7
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
```

```
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        841 CCAAGCTCCTCCTGGTGTAC 860
              ||||||||||||||||||||
Db         20 CCAAGCTCCTCCTGGTGTAC 1


RESULT 10
AAD49266/c
ID   AAD49266 standard; DNA; 20 BP.
XX
AC   AAD49266;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120477.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1..5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16..20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    7
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    9..10
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    19
FT                    /*tag=  f
FT                    /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Example 15; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        844 AGCTCCTCCTGGTGTACCAA 863
              ||||||||||||||||||||
Db         20 AGCTCCTCCTGGTGTACCAA 1


RESULT 11
AAD49267/c
ID   AAD49267 standard; DNA; 20 BP.
XX
AC   AAD49267;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120478.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1..5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16..20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    4
FT                    /*tag=  d
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FT                  /mod_base= m5c
FT   modified_base  12
FT                  /*tag=  e
FT                  /mod_base= m5c
FT   modified_base  17..18
FT                  /*tag=  f
FT                  /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 9 A; 4 C; 2 G; 5 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        864 TAGGTTATGTTATTCAGACT 883
              ||||||||||||||||||||
Db         20 TAGGTTATGTTATTCAGACT 1


RESULT 12
AAD49268/c
ID   AAD49268 standard; DNA; 20 BP.
XX
AC   AAD49268;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120479.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   9..10
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        875 ATTCAGACTTGGCACCCATG 894
              ||||||||||||||||||||
Db         20 ATTCAGACTTGGCACCCATG 1


RESULT 13
AAD49269/c
ID   AAD49269 standard; DNA; 20 BP.
XX
AC   AAD49269;
XX
DT   07-MAR-2003  (first entry)
XX
```

```
DE   Human phospholipid scramblase I antisense oligo, ISIS #120480.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   19..20
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        885 GGCACCCATGTCTACCAAAG 904
                  ||||||||||||||||||||
Db         20 GGCACCCATGTCTACCAAAG 1


RESULT 14
AAD49270/c
ID   AAD49270 standard; DNA; 20 BP.
XX
AC   AAD49270;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120481.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   6..7
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   9
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
```

```
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 3 G; 9 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        937 ACTAAAAATAAGTGGTCCAT 956
              ||||||||||||||||||||
Db         20 ACTAAAAATAAGTGGTCCAT 1


RESULT 15
AAD49271/c
ID   AAD49271 standard; DNA; 20 BP.
XX
AC   AAD49271;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120482.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   8..9
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 2 G; 8 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        939 TAAAAATAAGTGGTCCATGT 958
              ||||||||||||||||||||
Db         20 TAAAAATAAGTGGTCCATGT 1


RESULT 16
AAD49272/c
ID   AAD49272 standard; DNA; 20 BP.
XX
AC   AAD49272;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120483.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   4
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   12..13
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  i
FT                   /mod_base= m5c
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```
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 9 A; 7 C; 1 G; 3 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        970 CTGTTGTGGAGATGTTGATT 989
              ||||||||||||||||||||
Db         20 CTGTTGTGGAGATGTTGATT 1


RESULT 17
AAD49273/c
ID   AAD49273 standard; DNA; 20 BP.
XX
AC   AAD49273;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120484.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   14..15
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   18..19
FT                   /*tag=  f
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1020 TGGTTGGCAAAATTTCCAAG 1039
              ||||||||||||||||||||
Db         20 TGGTTGGCAAAATTTCCAAG 1


RESULT 18
AAD49274/c
ID   AAD49274 standard; DNA; 20 BP.
XX
AC   AAD49274;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Human phospholipid scramblase I antisense oligo, ISIS #120485.
XX
KW   Human; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Homo sapiens.
```

```
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1..2
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   4
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   6
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   15..16
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  i
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 77; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is human phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1045 GACTGGAATTTTGAGAGAGG 1064
              ||||||||||||||||||||
Db         20 GACTGGAATTTTGAGAGAGG 1

RESULT 19
AAZ36033/c
ID   AAZ36033 standard; DNA; 24 BP.
XX
AC   AAZ36033;
XX
DT   28-JAN-2000  (first entry)
XX
DE   Probe for mouse IGF-2 gene.
XX
KW   Probe; reverse transcriptase polymerase chain reaction; RT-PCR;
KW   gene expression; treatment; prognosis; diagnosis; ss; IGF-1 gene.
XX
OS   Synthetic.
OS   Mus sp.
XX
PN   WO9954510-A2.
XX
PD   28-OCT-1999.
XX
PF   23-APR-1999;   99WO-US08968.
XX
PR   23-APR-1998;   98US-0065673.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Lowe DG,  Schoenfeld JR;
XX
DR   WPI; 2000-013272/01.
XX
PT   Quantitative analysis of gene expression using RT-PCR assays  -
XX
PS   Example 1; Page 21; 46pp; English.
XX
CC   This sequence is a probe for the mouse IGF-1 gene. The probe is used in
CC   the method of the invention which relates to a novel quantitative reverse
CC   transcriptase polymerase chain reaction (RT-PCR) assay for quantitative
CC   gene expression. The method is used for determining a quantitative
CC   measure of the expression of a gene of interest in a biological sample by
CC   determining a normalised RNA prevalent for the gene of interest. The
CC   invention also relates to a method for determining the effect of a
CC   treatment on a quantitative measure of the expression of a gene of
CC   interest, or of a panel of genes of interest, in a sample by determining
CC   a normalised RNA equivalent for the gene of interest in a first untreated
CC   sample and a second treated sample. The methods are used for quantitative
CC   gene expression, where determination of changes in gene expression
CC   provides a measure of the biological response to a treatment or drug. The
CC   method have uses in prognostic and diagnostic applications.
XX
SQ   Sequence 24 BP; 6 A; 11 C; 4 G; 3 T; 0 other;

  Query Match             0.8%;  Score 17.6;  DB 1;  Length 24;
  Best Local Similarity   83.3%;  Pred. No. 27;
  Matches   20;  Conservative    0;  Mismatches    4;  Indels    0;  Gaps    0;

Qy        964 GTGCAGCTGTTGTGGAGATGTTGA 987
              || ||||||| |||||| || |||
Db         24 GTCCAGCTGTGGTGGAGCTGGTGA 1

RESULT 20
ABK30560
ID   ABK30560 standard; DNA; 20 BP.
XX
AC   ABK30560;
XX
DT   23-APR-2002  (first entry)
```

```
XX
DE   Human glioma-associated oncogene-1 antisense oligonucleotide ISIS 124892.
XX
KW   Human; glioma-associated oncogene-1 associated disease; infection;
KW   inflammation; tumour formation; cytostatic; antiinflammatory;
KW   antisense; phosphorothioate; ss.
XX
OS   Homo sapiens.
XX
PN   US6329203-B1.
XX
PD   11-DEC-2001.
XX
PF   08-SEP-2000; 2000US-0657042.
XX
PR   08-SEP-2000; 2000US-0657042.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt J;
XX
DR   WPI; 2002-138363/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   glioma-associated oncogene-1, for modulating the gene expression and
PT   treating diseases associated with expression of the oncogene in humans
PT   -
XX
PS   Claim 1; Column 45-46; 43pp; English.
XX
CC   The present invention relates to antisense compounds and methods for
CC   modulating the expression of human glioma-associated oncogene-1. The
CC   antisense compounds, particularly antisense oligonucleotides, target
CC   and inhibit the expression of human glioma-associated oncogene-1. The
CC   antisense compounds are useful for inhibiting the expression of human
CC   glioma-associated oncogene-1 in human cells or tissues and
CC   for treating an animal, particularly a human suspected of having or
CC   being prone to a disease or condition associated with expression of
CC   glioma-associated oncogene-1. The compounds are useful for diagnostics,
CC   therapeutics and as research reagent, e.g. prophylactically to prevent
CC   or delay infection, inflammation or tumour formation. The antisense
CC   compounds are safely and effectively administered to humans.
CC   ABK30509-ABK30586 represent the antisense oligonucleotides of the
CC   invention which comprise a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 8 A; 1 C; 8 G; 3 T; 0 other;

  Query Match             0.8%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 29;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        917 AATGAGAAAAGAGAGGATGT 936
              |||| |||||||||| |||
Db          1 AATGGGAAAAGAGAGGCTGT 20


RESULT 21
AAD49339/c
ID   AAD49339 standard; DNA; 20 BP.
XX
AC   AAD49339;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120549.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1..5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16..20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    5
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    11
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    14
FT                    /*tag=  f
FT                    /mod_base= m5c
FT   modified_base    18
FT                    /*tag=  g
FT                    /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 other;

  Query Match             0.8%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 29;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        693 CTGATTGCTGTACCCGAAAT 712
              |||| |||||||| ||||||
Db         20 CTGACTGCTGTACTCGAAAT 1


RESULT 22
AAD49341/c
```

```
ID   AAD49341 standard; DNA; 20 BP.
XX
AC   AAD49341;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120551.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 other;

  Query Match             0.8%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 29;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        725 TCTAGACCTTTTACCTTGAG 744
              ||||||||||| |||||| ||
Db         20 TCTAGACCTTTCACCTTAAG 1


RESULT 23
AAD49346/c
ID   AAD49346 standard; DNA; 20 BP.
XX
AC   AAD49346;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120556.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   5
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  e
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FT   modified_base   13
FT                   /*tag=  f
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FT   modified_base   18
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  i
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
```

```
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 other;

  Query Match             0.8%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 29;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        760 GGGTCAAGAAGTCATAACTC 779
              ||| |||||||||| ||||
Db         20 GGGCCAAGAAGTCATGACTC 1


RESULT 24
AAD49348/c
ID   AAD49348 standard; DNA; 20 BP.
XX
AC   AAD49348;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120558.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  i
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag=  j
FT                   /mod_base= m5c
FT   modified_base   20
FT                   /*tag=  k
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 other;

  Query Match             0.8%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 29;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        854 GGTGTACCAATAGGTTATGT 873
              || || ||||||||||||||
Db         20 GGGGTGCCAATAGGTTATGT 1


RESULT 25
AAD49338/c
ID   AAD49338 standard; DNA; 20 BP.
XX
AC   AAD49338;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120548.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
```

```
FT   modified_base   1..20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag= d
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag= e
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag= f
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag= g
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag= h
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag= i
FT                   /mod_base= m5c
FT   modified_base   19
FT                   /*tag= j
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 other;

  Query Match             0.8%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 36;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        678 TTGCAGCGGAAGATACTG 695
              |||||| ||||||||||
Db         18 TTGCAGTGGAAGATACTG 1


RESULT 26
AAT94317/c
ID   AAT94317 standard; DNA; 21 BP.
XX
AC   AAT94317;
XX
DT   04-MAR-1998  (first entry)
XX
DE   Human DPC4 sequence tagged site sense primer y899E8R.
XX
KW   DPC4; pancreatic cancer; deleted; locus 4; diagnosis; human;
KW   tumour suppressor gene; proliferative disease; bile duct; bladder;
KW   colorectal; cancer; Crohn's disease; colitis; PCR primer;
KW   sequence tagged site; STS; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9726271-A1.
XX
PD   24-JUL-1997.
XX
PF   17-JAN-1997;   97WO-US00827.
XX
PR   19-JAN-1996;   96US-0588821.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
XX
PI   Hahn SA,  Kern SE;
XX
DR   WPI; 1997-385290/35.
XX
PT   Deleted in Pancreatic Cancer locus 4 polypeptide - and related
PT   nucleic acids, used in diagnosis and treatment of proliferative
PT   diseases, e.g. cancer of pancreas or other organs
XX
PS   Example 2; Page 56; 104pp; English.
XX
CC   The present sequence represents a sequence tagged site (STS) primer used
CC   in the isolation of cosmids from the DPC4 (deleted in pancreatic cancer,
CC   locus 4) region, and gene identification. DPC4 is a tumour suppressor
CC   gene. Detection of truncated DPC4 protein, or of homozygous deletions or
CC   intragenic mutations in the nucleic acid encoding it, is used to diagnose
CC   (in vivo or in vitro) proliferative diseases, especially pancreatic
CC   carcinoma, bile duct, bladder or colorectal cancer, Crohn's disease,
CC   colitis-associated neoplasia or chronic ulcerative colitis. These
CC   conditions, where associated with a homozygous deletion, can be treated
CC   by administering an agent that: (a) modulates DPC4 expression,
CC   specifically a sense DPC4 sequence (particularly in the form of a
CC   vector, i.e. by gene therapy), but also an antisense sequence where DPC4
CC   protein is over expressed or (b) mimics the activity of DPC4. DPC4
CC   nucleic acid is also used as hybridisation probes for detecting
CC   presence/absence of human chromosome 18q21.1 fragments. When a
CC   homozygous deletion is detected in this region, an agent can be
CC   administered that accumulates within, or kills, only cells which
CC   contain such a deletion. This agent exploits the absence of an enzyme
CC   (or other protein) encoded by a neighbouring gene and lost by the
CC   deletion, i.e. it has a highly selective action.
XX
SQ   Sequence 21 BP; 3 A; 3 C; 5 G; 10 T; 0 other;

  Query Match             0.8%;  Score 16.2;  DB 1;  Length 21;
  Best Local Similarity   85.7%;  Pred. No. 45;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        772 CATAACTCTGGAGAGACCACT 792
              || |||||||||| |||| |
```

```
Db         21 CAAAACTCTGGAGAAACCAAT 1


RESULT 27
AAX19757
ID   AAX19757 standard; DNA; 23 BP.
XX
AC   AAX19757;
XX
DT   08-JUN-1999  (first entry)
XX
DE   Connexin 26 PCR primer SEQ ID NO:9.
XX
KW   Connexin 26; human; mutant; prelingual non-syndromic deafness;
KW   hereditary non-syndromic sensorineural deafness; detection;
KW   hereditary sensory defect; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9909210-A2.
XX
PD   25-FEB-1999.
XX
PF   14-AUG-1998;   98WO-EP05175.
XX
PR   15-AUG-1997;   97US-0055863.
XX
PA   (INSP ) INST PASTEUR.
XX
PI   Denoyelle-Gryson F,  Guesdon J,  Marlin-Duvernois S;
PI   Petit C,  Weil D;
XX
DR   WPI; 1999-181057/15.
XX
PT   Polynucleotide corresponding to mutant form of connexin 26  - used
PT   in a method for detecting a hereditary sensory defect
XX
PS   Claim 11; Page 40; 46pp; English.
XX
CC   The present invention describes a purified polynucleotide (I)
CC   corresponding to a mutant form of a connexin 26 polypeptide implicated
CC   in a hereditary sensory defect, where the mutant is responsible for
CC   prelingual non-syndromic deafness. The present sequence represents a
CC   PCR primer for use in methods, for the detection of a hereditary
CC   sensory defect, from the present invention. The methods from the
CC   present invention can be used to detect a hereditary sensory defect,
CC   the autosomal prelingual non-syndromic deafness for homozygous and
CC   heterozygous individuals.
XX
SQ   Sequence 23 BP; 2 A; 4 C; 7 G; 10 T; 0 other;

  Query Match             0.8%;  Score 16.2;  DB 1;  Length 23;
  Best Local Similarity   85.7%;  Pred. No. 53;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        947 AGTGGTCCATGTGTTGTGTGC 967
              |||| | | ||||||||||||
Db          3 AGTGATTCCTGTGTTGTGTGC 23


RESULT 28
AAD49342/c
ID   AAD49342 standard; DNA; 20 BP.
XX
AC   AAD49342;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120552.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   2
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 6 G; 6 T; 0 other;

  Query Match             0.8%;  Score 15.8;  DB 1;  Length 20;
  Best Local Similarity   89.5%;  Pred. No. 50;
  Matches   17;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        726 CTAGACCTTTTACCTTGAG 744
              |||||||||| ||||| ||
Db         20 CTAGACCTTTCACCTTAAG 2


RESULT 29
AAT29770
ID   AAT29770 standard; cDNA; 20 BP.
```

```
XX
AC   AAT29770;
XX
DT   21-NOV-1996  (first entry)
XX
DE   Barley betaine aldehyde dehydrogenase (BADH) gene PCR 5' primer.
XX
KW   Betaine aldehyde dehydrogenase; BADH; recombinant; transformant;
KW   transgenic plant; salt-resistance; anti-drying; barley;
KW   polymerase chain reaction; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   JP08103267-A.
XX
PD   23-APR-1996.
XX
PF   07-OCT-1994;   94JP-0243786.
XX
PR   07-OCT-1994;   94JP-0243786.
XX
PA   (MITU ) MITSUBISHI CHEM CORP.
XX
DR   WPI; 1996-253871/26.
XX
PT   Betaine aldehyde dehydrogenase gene - useful for conferring
PT   salt-tolerance on transformed plants
XX
PS   Example 1; Page 4; 8pp; Japanese.
XX
CC   AAT29770 and AAT29771 are PCR primers used to amplify the betaine
CC   aldehyde dehydrogenase (BADH) gene of common barley. The BADH
CC   encoding sequence can be used to transform other plant species
CC   imparting salt-resistance and anti-drying properties to the
CC   transformed plant. The sequence was used to successfully transform
CC   Nicotiana tabacum cultivar SR1.
XX
SQ   Sequence 20 BP; 6 A; 0 C; 5 G; 9 T; 0 other;

  Query Match             0.7%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 70;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        974 TGTGGAGATGTTGATTTTGA 993
              | || |||||||||| ||||
Db          1 TTTGAAGATGTTGATATTGA 20


RESULT 30
AAT03667
ID   AAT03667 standard; DNA; 20 BP.
XX
AC   AAT03667;
XX
DT   19-JUL-1996  (first entry)
XX
DE   Hepatitis C diagnostic oligonucleotide MR2.
XX
KW   Diagnosis; hepatitis C virus; HCV; primer; amplify; detection;
KW   hypervariable region; ss.
XX
OS   Synthetic.
XX
PN   JP07322881-A.
XX
PD   12-DEC-1995.
XX
PF   31-MAY-1994;   94JP-0142564.
XX
PR   31-MAY-1994;   94JP-0142564.
XX
PA   (SRLS-) SRL KK.
XX
DR   WPI; 1996-064846/07.
XX
PT   Oligo:nucleotide primers for amplifying hepatitis C virus cDNA -
PT   specifically the hyper:variable regions, useful for diagnosis of
PT   hepatitis C
XX
PS   Claim 4; Page 2; 27pp; Japanese.
XX
CC   The sequences given in AAT03664-73 are oligonucleotides which are used
CC   in the diagnosis of hepatitis C virus (HCV).  These oligonucleotides
CC   acts as primers to amplify region of the HCV genome, pref.
CC   hypervariable regions.  The amplified product is subjected to
CC   electrophoresis under denaturing conditions.  Preferably, primer MS1,
CC   MS2, MS3, MS4, MS5 or MS6 and an oligo selected from MR1, MR2 or MR1'
CC   are used as primer pairs.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 other;

  Query Match             0.7%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 70;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        805 CTGTTGTTGTCCCTGCTGCC 824
              |||||| ||| || ||||||
Db          1 CTGTTGATGTGCCAGCTGCC 20


RESULT 31
AAX97424/c
ID   AAX97424 standard; DNA; 20 BP.
XX
AC   AAX97424;
XX
DT   13-SEP-1999  (first entry)
XX
DE   Primer used to amplify Chlamydia pneumoniae polynucleotides.
XX
KW   Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW   sinusitis; purulent otitis media; erythema nodosum; pharyngitis;
KW   vaccine; neutralising epitope; PCR primer; ss.
XX
OS   Synthetic.
OS   Chlamydia pneumoniae.
XX
PN   WO9927105-A2.
XX
PD   03-JUN-1999.
XX
PF   20-NOV-1998;   98WO-IB01890.
XX
PR   04-NOV-1998;   98US-0107078.
PR   21-NOV-1997;   97FR-0014673.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-357842/30.
XX
PT   Genome sequence of Chlamydia pneumoniae
XX
PS   Page 1903; Disclosure; 1912pp; English.
XX
CC   AAX91991-X97517 represent PCR primers used to amplify open reading
CC   frames and other nucleic acid sequences from the genome of
CC   Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory
CC   disease such as pneumonia and bronchitis and is thought to be a
CC   contributing factor in heart disease, sarcoidosis, sinusitis, purulent
CC   otitis media, erythema nodosum or pharyngitis. The polypeptides encoded
CC   by the open reading frames of the C. pneumoniae genome (see AAY34584-
CC   AAY35879) can be used in immunogenic compositions as vaccines. Vectors
CC   containing C. pneumoniae nucleotides sequences can also be used as
CC   immunogenic compositions, especially where the vector directs the
```

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CC   expression of a neutralising epitope of C. pneumoniae.
XX
SQ   Sequence 20 BP; 6 A; 6 C; 3 G; 5 T; 0 other;

  Query Match             0.7%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 70;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        767 GAAGTCATAACTCTGGAGAG 786
              |||||| ||||| ||||| |
Db         20 GAAGTCTTAACTTTGGAGCG 1


RESULT 32
AAH39830
ID   AAH39830 standard; DNA; 20 BP.
XX
AC   AAH39830;
XX
DT   14-AUG-2001  (first entry)
XX
DE   SNP specific lower PCR primer SEQ ID 2626.
XX
KW   Single nucleotide polymorphism; SNP; single nucleotide primer extension;
KW   SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer;
KW   Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia;
KW   polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
KW   acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis;
KW   inflammation; forensic investigation; paternity analysis; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200129262-A2.
XX
PD   26-APR-2001.
XX
PF   13-OCT-2000; 2000WO-US28436.
XX
PR   15-OCT-1999;   99US-0160096.
XX
PA   (ORCH-) ORCHID BIOSCIENCES INC.
XX
PI   Picoult-Newburg L,  Pohl M;
XX
DR   WPI; 2001-290930/30.
XX
PT   New genotyping oligonucleotide, useful for detecting the presence,
PT   absence or identity of single polynucleotide polymorphism in a nucleic
PT   acid sample  -
XX
PS   Claim 1; Page 63; 83pp; English.
XX
CC   Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide
CC   primer extension (SNPE) primers, and the sequences of regions flanking
CC   sites of single nucleotide polymorphisms SNPs. The present invention
CC   includes kits for determining the presence or absence of a SNP, using the
CC   oligonucleotides of the invention. The PCR primers are used to amplify a
CC   SNP flanking sequence, the SNPE primer is used as a genotyping primer.
CC   The oligonucleotides are useful for genotyping a nucleic acid sample by
CC   performing a single-nucleotide primer extension reaction. The
CC   oligonucleotides are useful for determining the presence, absence or
CC   identity of a SNP and for genotyping nucleic acid samples, for e.g. to
CC   assess by association analysis the genotype of an individual or group of
CC   individuals, having a pathological phenotypic trait suspected of being
CC   caused by one or more SNPs. Phenotypic traits include diseases e.g.
CC   agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular
CC   dystrophy, familial hypercholesterolaemia, polycystic kidney disease,
CC   osteogenesis imperfecta and acute intermittent porphyria. Phenotypic
CC   traits also include symptoms of or susceptibility to multifactorial
CC   disease of which a component is or may be genetic such as autoimmune
CC   diseases, including, rheumatoid arthritis, multiple sclerosis,
CC   inflammation, cancer, nervous system diseases and infection by pathogenic
CC   microorganism. The method is also useful in forensic investigations and
CC   paternity analysis. The present sequence represents a PCR primer specific
CC   for a human SNP containing DNA sequence.
XX
SQ   Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 other;

  Query Match             0.7%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 70;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        881 ACTTGGCACCCATGTCTACC 900
              || |||||| ||||||| ||
Db          1 ACCTGGCACTCATGTCTCCC 20


RESULT 33
AAF69294/c
ID   AAF69294 standard; DNA; 20 BP.
XX
AC   AAF69294;
XX
DT   18-APR-2001  (first entry)
XX
DE   Integrin-linked kinase coding region targeted oligonucleotide #7.
XX
KW   Antisense; integrin-linked kinase; hIK; infection; tumour;
KW   inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   US6177273-B1.
XX
PD   23-JAN-2001.
XX
PF   26-OCT-1999;   99US-0428219.
XX
PR   26-OCT-1999;   99US-0428219.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2001-137069/14.
XX
PT   Novel antisense compounds capable of modulating expression of human
PT   Integrin-linked kinase, useful for diagnosis, prophylaxis and treatment
PT   of diseases, e.g. tumors, associated with expression of the kinase  -
XX
PS   Claim 3; Column 41; 40pp; English.
XX
CC   The present invention relates to an antisense compound 8 to
CC   30 bases in length targeted to the 5' untranslated (UTR) region,
CC   the coding region or the 3' UTR region human Integrin-linked
CC   kinase (hIK). The antisense oligonucleotides are useful for
CC   inhibiting the expression of human hIK in human cells or tissues,
CC   in vitro. The oligonucleotides can be utilized for diagnostics,
CC   therapeutics for the treatment of diseases associated with
CC   the expression of hIK, prophylaxis e.g. to prevent or delay infection,
CC   inflammation or tumor formation and as research reagent.
XX
SQ   Sequence 20 BP; 8 A; 8 C; 2 G; 2 T; 0 other;

  Query Match             0.7%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 70;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        967 CAGCTGTTGTGGAGATGTTG 986
              | |||| || |||||||||
Db         20 CTGCTGTGGTTGAGATGTTG 1


RESULT 34
AAD49343/c
ID   AAD49343 standard; DNA; 20 BP.
```

```
XX
AC   AAD49343;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120553.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   3
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   18
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 5 G; 7 T; 0 other;

  Query Match             0.7%;  Score 15.2;  DB 1;  Length 20;
  Best Local Similarity   85.0%;  Pred. No. 70;
  Matches   17;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        727 TAGACCTTTTACCTTGAGGA 746
              ||||||||| ||||| || |
Db         20 TAGACCTTTCACCTTAAGAA 1


RESULT 35
AAD49347/c
ID   AAD49347 standard; DNA; 20 BP.
XX
AC   AAD49347;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120557.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   6
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   17
FT                   /*tag=  h
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
```

CC The invention relates to an antisense compound targetted to a nucleic
CC acid molecule encoding phospholipid scramblase I and which specifically
CC hybridises with and inhibits the expression of phospholipid scramblase I,
CC or which hybridises with at least an 8-nucleobase portion of an active
CC site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC invention is useful for inhibiting the expression of human phospholipid
CC scramblase I in cells or tissues and for treating an animal having a
CC disease or condition associated with phospholipid scramblase I, such as
CC inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC cancer. The invention is useful for diagnostics, therapeutics and as
CC research reagent. The present sequence is mouse phospholipid scramblase I
CC antisense oligonucleotide.
XX
SQ Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 other;

Query Match 0.7%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 70;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 772 CATAACTCTGGAGAGACCAC 791
||| ||||||||| |||| |
Db 20 CATGACTCTGGAGCGACCTC 1

RESULT 36
AAZ76849
ID AAZ76849 standard; DNA; 21 BP.
XX
AC AAZ76849;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker downstream amplification primer SEQ ID NO:11205.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB00822.
XX
PR 21-APR-1998; 98US-0082614.
PR 23-NOV-1998; 98US-0109732.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome -
XX
PS Claim 9; Page 2619; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the
CC invention have a variety of uses: they can be used for high density
CC mapping of the human genome, and in complex association studies and
CC haplotyping studies which are useful in determining the genetic basis
CC for disease states. Compositions and methods of the invention can also
CC be useful for the identification of the targets for the development of
CC pharmaceutical agents and diagnostic methods, as well as the
CC characterisation of the differential efficacious responses to and side
CC effects from pharmaceutical agents acting on a disease as well as other
CC treatment.
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297
CC and 3367, are not actually given a sequence in the Sequence Listing
CC from the present invention.
XX
SQ Sequence 21 BP; 4 A; 0 C; 7 G; 10 T; 0 other;

Query Match 0.7%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 77;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 976 TGGAGATGTTGATTTTGAGA 995
||||| ||||| |||| |||
Db 1 TGGAGTTGTTGTTTTTAAGA 20

RESULT 37
ABZ21509
ID ABZ21509 standard; cDNA; 21 BP.
XX
AC ABZ21509;
XX
DT 28-MAR-2003 (first entry)
XX
DE Human collagen related silk worm polynucleotide PCR primer SEQ ID 20.
XX
KW Human; collagen; silkworm; transgenic; cocoon; silk gland; medicine;
KW food; cosmetic; PCR; primer; ss.
XX
OS Bombyx mori.
XX
PN WO200286119-A1.
XX
PD 31-OCT-2002.
XX
PF 11-JUN-2001; 2001WO-JP04906.
XX
PR 18-APR-2001; 2001JP-0120155.
XX
PA (NISC-) JAPAN SCI & TECHNOLOGY CORP.
PA (HIRO-) HIROSHIMA IND TECHNOLOGY ORG.
PA (TERU) TERUMO CORP.
PA (KOKE) KOKEN KK.
PA (NAAG-) NAT INST AGROBIOLOGICAL SCI.
XX
PI Yoshizato K, Tomita M, Satou T, Mori H, Tamura T, Adachi T;
PI Munetsuna H;
XX
DR WPI; 2003-093134/08.
XX
PT Transformed silkworm producing recombinant human collagen in cocoon or
PT silk gland, for application in medicine, foods and cosmetics -
XX
PS Example 2; Page 55; 63pp; Japanese.
XX
CC The invention relates to a transformed silkworm that has a polynucleotide
CC encoding human collagen in its genomic DNA and produces recombinant human
CC collagen as a part of proteins in its cocoon or silk gland. The
CC transformant is for producing recombinant human collagen which can then
CC be used for application in medicine, foods and cosmetics. The recombinant
CC human collagen thus produced is highly pure and available easily in large
CC quantities, which is highly safe, free from contaminants like pathogens
CC including viruses and prions and does not show antigenicity in humans.
CC The present sequence is that of a human collagen related silk worm
CC polynucleotide PCR primer used in examples of the invention.
XX
SQ Sequence 21 BP; 10 A; 6 C; 3 G; 2 T; 0 other;

Query Match 0.7%; Score 15.2; DB 1; Length 21;
Best Local Similarity 85.0%; Pred. No. 77;
Matches 17; Conservative 0; Mismatches 3; Indels 0;

```
Qy        783 AGAGACCACTAAGATGTAGC 802
              | |||||||||| ||| |||
Db          1 ACAGACCACTAAAATGAAGC 20


RESULT 38
AAZ00580/c
ID   AAZ00580 standard; DNA; 20 BP.
XX
AC   AAZ00580;
XX
DT   06-OCT-1999  (first entry)
XX
DE   Human GPC4 primer PR11-39.
XX
KW   Glypican; GPC1; GPC3; GPC4; GPC5; GPC6; human; glypican-related protein;
KW   glypican-6; glypican-4; glypican-1; glypican-3; glypican-5; diagnosis;
KW   treatment; abnormal; cell growth; cell behaviour; somatic overgrowth;
KW   tumour formation; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9937764-A2.
XX
PD   29-JUL-1999.
XX
PF   20-JAN-1999;   99WO-EP00329.
XX
PR   27-JAN-1998;   98EP-0200226.
XX
PA   (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
XX
PI   David GJF,  Veugelers MPD;
XX
DR   WPI; 1999-469128/39.
XX
PT   New polynucleotides encoding glypican-related proteins, used to
PT   diagnose, e.g. tumor formation
XX
PS   Example 2; Page 33; 79pp; English.
XX
CC   This invention describes the isolation of novel human polynucleotides
CC   encoding glypican-related proteins, glypican-6 (GPC6) and glypican-4
CC   (GPC4). The invention also describes the polynucleotide and encoded
CC   protein sequences of glypican-1 (GPC1), glypican-3 (GPC3) and glypican-5
CC   (GPC5). The products of the invention can be used to diagnose and treat
CC   disorders and diseases, particularly those involving abnormal cell
CC   growth and behaviour, such as somatic overgrowth and tumour formation.
CC   AAZ00560-Z00580 represent primers used in the amplification of GPC4.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 other;

  Query Match             0.7%;  Score 15;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 77;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        787 ACCACTAAGATGTAG 801
              |||||||||||||||
Db         15 ACCACTAAGATGTAG 1


RESULT 39
AAZ70085/c
ID   AAZ70085 standard; DNA; 18 BP.
XX
AC   AAZ70085;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker upstream amplification primer SEQ ID NO:4441.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; ga
KW   haplotyping; hybridisation; identification; characteris
KW   amplification; single nucleotide polymorphism; SNP; PCR
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB00822.
XX
PR   21-APR-1998;   98US-0082614.
PR   23-NOV-1998;   98US-0109732.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome  -
XX
PS   Claim 8; Page 1178; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the
CC   invention have a variety of uses: they can be used for high density
CC   mapping of the human genome, and in complex association studies and
CC   haplotyping studies which are useful in determining the genetic basis
CC   for disease states. Compositions and methods of the invention can also
CC   be useful for the identification of the targets for the development of
CC   pharmaceutical agents and diagnostic methods, as well as the
CC   characterisation of the differential efficacious responses to and side
CC   effects from pharmaceutical agents acting on a disease as well as other
CC   treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297
CC   and 3367, are not actually given a sequence in the Sequence Listing
CC   from the present invention.
XX
SQ   Sequence 18 BP; 3 A; 7 C; 1 G; 7 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 18;
  Best Local Similarity   88.9%;  Pred. No. 70;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1049 GGAATTTTGAGAGAGGCA 1066
              ||||| |||| |||||||
Db         18 GGAATGTTGAAAGAGGCA 1


RESULT 40
AAV48067
ID   AAV48067 standard; DNA; 20 BP.
XX
AC   AAV48067;
XX
DT   19-OCT-1998  (first entry)
XX
DE   Murine B7-2 targetted oligonucleotide 11354.
XX
KW   ss; mouse; B7; T cell; inflammation; autoimmune disease; cell activation;
KW   cell proliferation.
XX
OS   Synthetic.
OS   Mus sp.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
```

```
FT                  /*tag= a
FT                  /note= "Phosphorothioate linkages"
XX
PN   WO9829124-A1.
XX
PD   09-JUL-1998.
XX
PF   16-DEC-1997;   97WO-US23270.
XX
PR   31-DEC-1996;   96US-0777266.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Vickers TA;
XX
DR   WPI; 1998-387783/33.
XX
PT   New oligo:nucleotide(s) that modulate expression of B7 proteins -
PT   used for, e.g. controlling activation and proliferation of T cells,
PT   particularly for treatment, diagnosis and prevention of inflammation
XX
PS   Example 1; Page 41; 120pp; English.
XX
CC   The oligonucleotides which specifically hybridise to B7 modulate its
CC   expression (and thus T cell activation and proliferation).  This is
CC   particularly useful for treatment and prevention of inflammation and
CC   autoimmune diseases, e.g. asthma, (juvenile) diabetes, myasthenia gravis,
CC   Grave's disease, rheumatoid arthritis, allograft rejection, psoriasis,
CC   (systemic) lupus erythematosus, multiple sclerosis, contact dermatitis,
CC   rhinitis, allergy, cancer and metastases.  The oligonucleotides may also
CC   be used to manipulate T cell activation ex vivo; to determine or detect
CC   B7 protein expression; for diagnosis; as assay and purification reagents,
CC   and to study physiological roles of B7 proteins.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 86;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        815 CCCTGCTGCCTTCAGGAG 832
              || |||||||| ||||||
Db          1 CCGTGCTGCCTACAGGAG 18


RESULT 41
AAZ23719/c
ID   AAZ23719 standard; DNA; 20 BP.
XX
AC   AAZ23719;
XX
DT   14-JAN-2000  (first entry)
XX
DE   M. fossilis Cytb primer 4.
XX
KW   CytB; loach; detection; identification; primer; ss.
XX
OS   Synthetic.
OS   Misgurnus fossilis.
XX
PN   JP11266869-A.
XX
PD   05-OCT-1999.
XX
PF   25-MAR-1998;   98JP-0077001.
XX
PR   25-MAR-1998;   98JP-0077001.
XX
PA   (KENS-) KENSETU GIJUTSU KENKYUSHO KK.
XX
DR   WPI; 1999-613776/53.
XX
PT   Discrimination of an individual by using loach Cytb gene - involving an
PT   amplification process
XX
PS   Disclosure; Page 4; 11pp; Japanese.
XX
CC   This invention describes a novel method for the discrimination of a
CC   loach individual using the Misgurnus fossilis Cytb gene. The products of
CC   the invention can be used to detect a mutation of the loach Cytb gene.
CC   AAZ23712-Z23725 represent primers used in the amplification and
CC   isolation of the M. fossilis Cytb protein described in the method of the
CC   invention.
XX
SQ   Sequence 20 BP; 3 A; 3 C; 9 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 86;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        887 CACCCATGTCTACCAAAG 904
              ||||| || |||||||||
Db         19 CACCCCTGGCTACCAAAG 2


RESULT 42
AAZ04493
ID   AAZ04493 standard; DNA; 20 BP.
XX
AC   AAZ04493;
XX
DT   07-OCT-1999  (first entry)
XX
DE   PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX
KW   Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
KW   paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
KW   nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
KW   bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX
OS   Synthetic.
OS   Chlamydia trachomatis.
XX
PN   WO9928475-A2.
XX
PD   10-JUN-1999.
XX
PF   27-NOV-1998;   98WO-IB01939.
XX
PR   04-NOV-1998;   98US-0107077.
PR   28-NOV-1997;   97FR-0015041.
PR   17-DEC-1997;   97FR-0016034.
XX
PA   (GEST ) GENSET.
XX
PI   Griffais R;
XX
DR   WPI; 1999-371125/31.
XX
PT   Genome sequence of Chlamydia trachomatis
XX
PS   Disclosure; Page 1693; 1755pp; English.
XX
CC   PCR primers AAZ01426-Z06209 were used to amplify open reading frames
CC   (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
CC   encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
CC   against Chlamydia trachomatis. Antisense and ribozyme sequences
CC   can also be used to control growth of the microorganism. Chlamydia
CC   trachomatis is responsible for a large number of diseases, e.g. eye
CC   diseases such as conventional trachoma, nonendemic trachoma,
CC   paratrachoma, and inclusion conjunctivitis; genital diseases such as
CC   nongonococcal uretritis, epidymitis, cervicitis, salpingitis,
CC   perihepatitis, bartholinitis; pneumopathy in breast feeding infants;
CC   and venereal lymphogranulomatosis. The polypeptides of the
CC   invention may be of use in treating these diseases.
XX
```

```
SQ   Sequence 20 BP; 1 A; 6 C; 5 G; 8 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 86;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        803 AGCTGTTGTTGTCCCTGC 820
              | ||||||||| ||||||
Db          2 ATCTGTTGTTGCCCCTGC 19


RESULT 43
AAZ57197
ID   AAZ57197 standard; DNA; 20 BP.
XX
AC   AAZ57197;
XX
DT   03-APR-2000  (first entry)
XX
DE   Mouse TBP PCR primer TF205 SEQ ID NO:11.
XX
KW   Human; activin A; Pax4 gene; expression; potentiator; insulin;
KW   pancreatic beta cell; diabetes; PCR primer; ss.
XX
OS   Mus sp.
XX
PN   WO9966073-A1.
XX
PD   23-DEC-1999.
XX
PF   15-JUN-1999;   99WO-JP03182.
XX
PR   16-JUN-1998;   98JP-0167976.
XX
PA   (YAMA ) YAMANOUCHI PHARM CO LTD.
XX
PI   Ueda Y;
XX
DR   WPI; 2000-097752/08.
XX
PT   Screening potential Pax4 gene potentiators, used in treatment of, e.g.
PT   diabetes -
XX
PS   Disclosure; Page 18; 38pp; Japanese.
XX
CC   The present invention describes the a method for screening potential
CC   inhibitors of the expression of the Pax4 gene by contacting the
CC   potential inhibitor with pancreatic beta cells and measuring the
CC   expression of the gene in these cells is new. Substances identified
CC   by the screening method potentiate the expression of the Pax4 gene in
CC   pancreatic beta cells and accelerate the expression of insulin gene in
CC   those cells. The method can be used in the treatment of disorders in
CC   which the exhaustion of pancreatic beta cells is involved, such as
CC   diabetes. The present sequence represents a PCR primer which is used
CC   in the exemplification of the present invention.
XX
SQ   Sequence 20 BP; 3 A; 1 C; 8 G; 8 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 86;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        972 GTTGTGGAGATGTTGATT 989
              ||||  ||||||||||||
Db          2 GTTGCTGAGATGTTGATT 19


RESULT 44
AAF32909
ID   AAF32909 standard; DNA; 20 BP.
XX
AC   AAF32909;
XX
DT   23-MAR-2001  (first entry)
XX
DE   Human B7-2 mRNA antisense oligonucleotide SEQ ID NO: 106.
XX
KW   Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
KW   autoimmune disorder; phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
XX
PN   WO200074687-A1.
XX
PD   14-DEC-2000.
XX
PF   25-MAY-2000; 2000WO-US14471.
XX
PR   04-JUN-1999;   99US-0326186.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Vickers TA,  Karras JG;
XX
DR   WPI; 2001-049991/06.
XX
PT   Novel compound for diagnosing, preventing and treating immune
PT   disorders, comprising an oligonucleotide that specifically hybridizes
PT   with a nucleic acid sequence encoding B7 protein  -
XX
PS   Example 1; Page 53; 162pp; English.
XX
CC   The present invention provides sequences of antisense oligonucleotides
CC   targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
CC   The antisense sequences have phosphorothioate backbones and some
CC   nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
CC   the treatment of inflammatory and autoimmune disorders, including asthma,
CC   juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
CC   rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
CC   multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
CC   dermatitis, rhinitis, allergies and cancer.
XX
SQ   Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 86;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        815 CCCTGCTGCCTTCAGGAG 832
              || |||||||| ||||||
Db          1 CCGTGCTGCCTACAGGAG 18


RESULT 45
ABQ93574
ID   ABQ93574 standard; DNA; 21 BP.
XX
AC   ABQ93574;
XX
DT   16-OCT-2002  (first entry)
XX
DE   Human DICS1/DISC2 polymorphism disc43a.
XX
KW   Human; Disrupted In Schizophrenia 1; DISC1; neuroleptic; gene therapy;
KW   neuropsychiatric disorder; schizoaffective disorder; bipolar disorder;
KW   unipolar affective disorder; adolescent conduct disorder;
KW   schizophrenia; SNP; single nucleotide polymorphism; ss.
XX
OS   Homo sapiens.
XX
PN   WO200258637-A2.
XX
PD   01-AUG-2002.
XX
PF   23-JAN-2002; 2002WO-US02186.
XX
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PR   24-JAN-2001; 2001US-0770107.
XX
PA   (MILL-) MILLENIUM PHARM INC.
XX
PI   Meyer JM,  Barrington-martin R,  Parker A,  Barnes GT;
XX
DR   WPI; 2002-590791/63.
XX
PT   New human Disrupted-In-Schizophrenia (DISC) 1 and DISC2 genes
PT   containing single nucleotide polymorphisms, useful for preventing or
PT   treating neuropsychiatric disorders e.g. schizophrenia  -
XX
PS   Claim 5; Page 107; 169pp; English.
XX
CC   The invention relates to a novel Disrupted-In-Schizophrenia (DISC) 1
CC   allelic variant polynucleotide. The polypeptides of the invention have
CC   neuroleptic activity. The polynucleotides may have a use in gene therapy.
CC   DISC1 or DISC2 nucleic acid molecules are useful for diagnosing or
CC   treating a subject having a disease or disorder associated with specific
CC   DISC1 or DISC2 alleles and/or aberrant DISC1 expression or activity e.g.
CC   neuropsychiatric disorder such as schizoaffective, bipolar, unipolar
CC   affective or adolescent conduct disorder or schizophrenia. Similarly,
CC   the compound that inhibits DISC1 protein activity may be used in the
CC   method for treating such neuropsychiatric disorders. The sequences shown
CC   in ABQ93564-ABQ93574 represent the polymorphic sites and boundary
CC   sequences present in DISC1.
XX
SQ   Sequence 21 BP; 9 A; 5 C; 4 G; 3 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 21;
  Best Local Similarity   88.9%;  Pred. No. 95;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        831 AGATAGAAATCCAAGCTC 848
              ||| ||||||| ||||||
Db          1 AGAAAGAAATCGAAGCTC 18


RESULT 46
ABK86759/c
ID   ABK86759 standard; DNA; 21 BP.
XX
AC   ABK86759;
XX
DT   24-SEP-2002  (first entry)
XX
DE   PCR primer, 14L3, used to amplify 2,5 DKG reductase c (clone pI-14).
XX
KW   2,5-diketo-D-gluconic acid reductase c; DKGRc; aldo-keto reductase;
KW   glucose; ascorbic acid; 2-keto-L-gulonic acid; vitamin C; immunogen;
KW   catalytic efficiency; thermal stability; solvent tolerance; pH optimum;
KW   PCR; primer; ss; pI-14.
XX
OS   Unidentified.
XX
PN   WO200229019-A2.
XX
PD   11-APR-2002.
XX
PF   02-OCT-2001; 2001WO-US42445.
XX
PR   04-OCT-2000; 2000US-0684385.
XX
PA   (GEMV ) GENENCOR INT INC.
XX
PI   Donnelly M,  Eschenfeldt WH,  Trent J;
XX
DR   WPI; 2002-463231/49.
XX
PT   Diketo-D-gluconic acid reductases, isolated from the environment using
PT   polymerase chain reaction methods, useful to provide new catalysts with
PT   desirable traits for industrial processes  -
XX
PS   Example 1; Page 30; 58pp; English.
XX
CC   The invention discloses the isolated polypeptide, and polynucleotide
CC   encoding it, 2,5-diketo-D-gluconic acid reductase (DKGR) which is a
CC   member of the aldo-keto reductase superfamily. The reductase, in
CC   particular in Pantoea sp., is useful for converting glucose to ascorbic
CC   acid, by culturing the host cell under conditions suitable for the
CC   expression of DKGR. Glucose is first converted to 2,5-diketo-D-gluconic
CC   acid by endogenous oxidases and this is then reduced enzymatically to
CC   2-keto-L-gulonic acid by a heterologous DKGR expressed in the production
CC   strain of bacteria. DKGR nucleic acids and proteins are useful to make
CC   enzymes useful in industrial processes to convert glucose to vitamin C in
CC   a single organism. DKGR proteins or their fragments and derivatives are
CC   useful as immunogens to produce antibodies useful in screening for
CC   similar enzymes from other organisms and samples. These antibodies are
CC   employed to screen gene libraries to identify DKG reductases or cross
CC   reactive activities. DKGR nucleic acids may be sequenced and subjected to
CC   site specific mutagenesis to develop modified DKGR with desired
CC   properties that are absent or less pronounced in the wild-type proteins,
CC   such as greater catalytic efficiency, stability to heat, solvent
CC   tolerance, NADH dependent activity and different optimum pH. The sequence
CC   presented is the PCR primer, 14L3, used to amplify
CC   2,5-diketo-D-gluconic acid reductase c (DKGRc) gene (clone pI-14) from
CC   DNA extracted from soil samples.
XX
SQ   Sequence 21 BP; 6 A; 6 C; 5 G; 4 T; 0 other;

  Query Match             0.7%;  Score 14.8;  DB 1;  Length 21;
  Best Local Similarity   88.9%;  Pred. No. 95;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        876 TTCAGACTTGGCACCCAT 893
              || |||||||||| |||
Db         21 TTGAGACTTGGCACGCAT 4


RESULT 47
AAF02994
ID   AAF02994 standard; DNA; 17 BP.
XX
AC   AAF02994;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1289.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 85; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
```

```
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 7 A; 0 C; 6 G; 4 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 78;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1048 TGGAATTTTGAGAGAG 1063
                ||||||  |||||||||
Db          1 TGGAATATTGAGAGAG 16


RESULT 48
ABZ10940/c
ID   ABZ10940 standard; DNA; 18 BP.
XX
AC   ABZ10940;
XX
DT   16-JAN-2003  (first entry)
XX
DE   Haematopoietic cell proliferation disorder related oligonucleotide #1080.
XX
KW   Human; haematopoietic cell proliferation disorder; cytostatic;
KW   gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW   cytosine methylation state; probe; primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200277272-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-EP03401.
XX
PR   26-MAR-2001; 2001US-278333P.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Berlin K,  Braun A,  Distler J,  Guetig D,  Howe A,  Mueller J;
PI   Olek A,  Piepenbrock C,  Adorjan P,  Grabs G,  Lesche R,  Leu E;
PI   Lewin A,  Lipscher E,  Maier S,  Model F,  Mueller V,  Otto T;
PI   Pelet C,  Schwope I,  Ziebarth H;
XX
DR   WPI; 2003-018942/01.
XX
PT   Detecting and differentiating between hematopoietic cell proliferative
PT   disorders, comprises contacting a target nucleic acid with a reagent
PT   that distinguishes between methylated and non-methylated CpG
PT   dinucleotides -
XX
PS   Claim 15; Page 71; 117pp; English.
XX
CC   The present invention describes a method for detecting and
CC   differentiating between haematopoietic cell proliferative disorders
CC   associated with at least 1 gene and/or their regulatory regions in a
CC   subject. The method comprises contacting a target nucleic acid in a
CC   biological sample obtained from the subject with at least 1 reagent,
CC   which distinguishes between methylated and non-methylated CpG
CC   dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC   represent specifically claimed nucleotide sequences from the present
CC   invention. Oligonucleotides from the present invention can be used: for
CC   differentiating between healthy haematopoietic cells and proliferative
CC   disorder haematopoietic cells; for differentiating between acute
CC   lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC   determining the cytosine methylation state and/or single nucleotide
CC   polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC   related sequences and their complements; and as primers for the
CC   amplification of haematopoietic cell proliferation disorder related
CC   DNA sequences. The nucleotide sequences from the present invention can
CC   also be used for detecting a predisposition to, differentiation between
CC   subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC   haematopoietic cell proliferative disorders. The present method enables
CC   a highly specific classification of haematopoietic cell proliferative
CC   disorders allowing for improved and informed treatment of patients.
XX
SQ   Sequence 18 BP; 9 A; 4 C; 1 G; 4 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 18;
  Best Local Similarity   93.8%;  Pred. No. 87;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        983 GTTGATTTTGAGATTA 998
              ||| |||||||||||||
Db         18 GTTTATTTTGAGATTA 3


RESULT 49
AAT35504/c
ID   AAT35504 standard; cDNA; 19 BP.
XX
AC   AAT35504;
XX
DT   06-MAY-1997  (first entry)
XX
DE   Primer 14R for human HERG corresponding to intron III.
XX
KW   PCR; polymerase chain reaction; primer; amplify; human; SCN5A; probe;
KW   HERG; long QT syndrome; potassium ion channel; cardiac sodium channel;
KW   chromosome 3-linked long QT; ss.
XX
OS   Synthetic.
XX
PN   WO9628537-A1.
XX
PD   19-SEP-1996.
XX
PF   08-MAR-1996;   96WO-US03186.
XX
PR   20-APR-1995;   95US-0426118.
PR   09-MAR-1995;   95US-0401512.
XX
PA   (UTAH ) UNIV UTAH RES FOUND.
XX
PI   Curran ME,  Keating MT,  Sanguinetti MC,  Wang Q;
XX
DR   WPI; 1996-433814/43.
XX
PT   DNA encoding mutant SCN5A and HERG polypeptide(s) - useful in
PT   diagnosis of long QT syndrome.
XX
PS   Example 7; Page 49; 145pp; English.
XX
CC   AAT35489-T35507 represent amplification primers for human HERG genomic
CC   DNA. The amplified sequences can then be used as probes for the mutant
CC   HERG sequences of the invention.  The mutant SCN5A coding sequence of
CC   the invention, and the mutant HERG coding sequence of the invention both
CC   encode polypeptides that cause long QT syndrome.  HERG encodes a
CC   potassium ion channel, and the acquired form of long QT is associated
CC   with this ion channel.  SCN5A encodes a cardiac sodium channel, and
CC   mutations in this sequence are thought to cause chromosome 3-linked long
CC   QT.  The probes amplified by these sequences will hybridise to the
CC   mutant sequences of the invention, but do not hybridise to DNA encoding
CC   the wild type proteins.  Knowledge of the DNA encoding the mutant SCN5A
CC   and HERG proteins is useful for diagnosis of a polymorphism causing long
CC   QT syndrome. The probe sequences are useful for detecting the
CC   polymorphisms especially by identifying a mismatch by an RNase assay.
CC   Antibodies against the mutant proteins can be used in the detection of
CC   the mutants.
XX
```

```
SQ   Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 19;
  Best Local Similarity   93.8%;  Pred. No. 97;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1039 GCACTGGACTGGAATT 1054
              ||||||||||||||| |
Db         19 GCACTGGACTGGAAAT 4


RESULT 50
AAA07620/c
ID   AAA07620 standard; DNA; 19 BP.
XX
AC   AAA07620;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Primer 14 R for SSCP analysis of HERG gene.
XX
KW   HERG; mutation; long QT syndrome; LQT syndrome; gene therapy; SSCP;
KW   human; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200006772-A1.
XX
PD   10-FEB-2000.
XX
PF   20-JUL-1999;   99WO-US16337.
XX
PR   27-JUL-1998;   98US-0122847.
PR   06-JAN-1999;   99US-0226012.
XX
PA   (UTAH ) UNIV UTAH RES FOUND.
XX
PI   Keating MT,  Splawski I;
XX
DR   WPI; 2000-195319/17.
XX
PT   New isolated mutant HERG nucleic acids, useful for developing products
PT   for the diagnosis, prevention and treatment of long QT syndrome  -
XX
PS   Example 6; Page 69; 163pp; English.
XX
CC   The invention relates to a HERG protein having a mutation compared to
CC   wild-type HERG, and is useful for developing products for the diagnosis,
CC   prevention and treatment of long QT (LQT) syndrome. The products and
CC   methods can be used for the diagnosis of subjects with LQT syndrome.
CC   They can also be used to screen for drugs for treating or preventing LQT
CC   syndrome. The HERG nucleic acids can also be used for gene therapy and
CC   HERG peptides can be used for peptide therapy. Sequences AAA07607-623
CC   represent PCR primers for SSCP analysis of the HERG gene.
XX
SQ   Sequence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 19;
  Best Local Similarity   93.8%;  Pred. No. 97;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1039 GCACTGGACTGGAATT 1054
              ||||||||||||||| |
Db         19 GCACTGGACTGGAAAT 4


RESULT 51
AAL46072
ID   AAL46072 standard; DNA; 20 BP.
XX
AC   AAL46072;
XX
DT   19-JUL-2002  (first entry)
XX
DE   Human prolactin coding sequence PCR primer #1.
XX
KW   Human; prolactin; prolactin variant; cancer; breast cancer;
KW   cytostatic; antiproliferative; prostate cancer; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9958097-A2.
XX
PD   18-NOV-1999.
XX
PF   12-MAY-1999;   99WO-US10545.
XX
PR   12-MAY-1998;   98US-0085128.
XX
PA   (GREE-) GREENVILLE HOSPITAL SYSTEM.
XX
PI   Chen WY,  Wagner TE;
XX
DR   WPI; 2000-038947/03.
XX
PT   Human prolactin variants and their use in treating breast or prostate
PT   cancer, and in methods of inducing apoptosis  -
XX
PS   Examples; Page 31; 84pp; English.
XX
CC   The present invention relates to a method of inhibiting the proliferation
CC   of a breast or prostate cancer cell which expresses a prolactin receptor
CC   comprising exposing the cell to a G129 substituted variant of human
CC   prolactin or a cell-free truncated prolactin receptor. The methods and
CC   variants are used to treat human breast and prostate cancer and
CC   proliferative disorders, inducing apoptosis in cells expressing the
CC   prolactin receptor and the prolactin variants also act as antagonists at
CC   the prolactin receptor. The present sequence is a PCR primer used to
CC   isolate the human prolactin cDNA.
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        799 TAGCAGCTGTTGTTGT 814
              |||||| |||||||||
Db          4 TAGCAGTTGTTGTTGT 19


RESULT 52
AAA28061/c
ID   AAA28061 standard; DNA; 20 BP.
XX
AC   AAA28061;
XX
DT   01-DEC-2000  (first entry)
XX
DE   Human androgen shutoff gene intron/exon 5 boundary sequence.
XX
KW   Androgen-induced tumour suppressor; androgen shutoff gene 3; AS3;
KW   chromosome 13q12-13q; cell proliferation inhibitor; prostate cancer;
KW   diagnosis; treatment; cytostatic; human; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    12..13
FT                   /*tag=  a
FT                   /note= "Intron/exon 5 boundary"
XX
PN   WO200050454-A1.
XX
PD   31-AUG-2000.
XX
```

```
PF   24-FEB-2000; 2000WO-US04732.
XX
PR   24-FEB-1999;   99US-0121461.
XX
PA   (TUFT ) TUFTS COLLEGE.
XX
PI   Soto AM,  Sonnenschein C,  Geck P,  Szelei J;
XX
DR   WPI; 2000-565451/52.
XX
PT   New human androgen-induced tumor suppressor cDNA sequence termed
PT   'Androgen Shutoff Gene 3' (AS3), useful as a marker for the efficient
PT   diagnosis and treatment of prostate cancer -
XX
PS   Disclosure; Fig 5; 152pp; English.
XX
CC   This invention relates to a human androgen-induced tumour suppressor cDNA
CC   sequence termed "Androgen Shutoff Gene 3" (AS3). The AS3 gene is located
CC   on chromosome 13 at position 13q12-13q. AS3 has a role in inhibiting cell
CC   proliferation and use as a marker for the efficient diagnosis and
CC   treatment of prostate cancer. The invention includes AS3 cDNA and protein
CC   sequences, a vector comprising the cDNA sequence, a host cell transfected
CC   with the expression vector, and a method for producing an AS3 polypeptide
CC   comprising culturing the transfected cells. AS3 has cytostatic activity,
CC   and acts to suppress cell proliferation. The AS3 gene is useful as a
CC   marker for the efficient diagnosis and treatment of prostate cancer. The
CC   AS3 nucleic acid molecule can be used as a source of antisense agents for
CC   sequence specific modulation of gene expression. The AS3 protein may be
CC   used in the treatment of disorders caused by aberrant modification or
CC   mutation of a gene encoding an AS3 protein, misregulation of the AS3 gene
CC   or aberrant post-translational modification of the AS3 protein. This
CC   sequence represents the boundary between a human AS3 intron and exon.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 2 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        933 ATGTACTAAAAATAAG 948
              |||| ||||||||||
Db         17 ATGTTCTAAAAATAAG 2


RESULT 53
AAZ48616
ID   AAZ48616 standard; DNA; 20 BP.
XX
AC   AAZ48616;
XX
DT   03-MAR-2000  (first entry)
XX
DE   PCR primer for human prolactin gene.
XX
KW   PCR primer; prolactin; human; proliferation inhibitor; breast cancer;
KW   prostate cancer; prolactin receptor; therapy; proliferative disorder;
KW   apoptosis induction; therapy; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9958142-A1.
XX
PD   18-NOV-1999.
XX
PF   11-MAY-1999;   99WO-US10232.
XX
PR   12-MAY-1998;   98US-0085128.
PR   05-FEB-1999;   99US-0246041.
XX
PA   (CHEN/) CHEN W Y.
PA   (WAGN/) WAGNER T E.
XX
PI   Chen WY,  Wagner TE;
XX
DR   WPI; 2000-062263/05.
XX
PT   Use of human prolactin variants to treat breast or prostate cancer,
PT   methods of inducing apoptosis  -
XX
PS   Example; Page 23; 77pp; English.
XX
CC   This sequence represents a PCR primer for the human prolactin gene.
CC   The invention relates to a method of inhibiting the proliferation of a
CC   breast or prostate cancer cell which expresses a prolactin receptor
CC   comprises exposing the cell to an effective concentration of a variant of
CC   human prolactin having a substitution of the glycine at position 129 or a
CC   cell-free truncated prolactin receptor. The method is used to treat human
CC   breast and prostate cancer and proliferative disorders. The method is
CC   also useful for inducing apoptosis in cells expressing the prolactin
CC   receptor. The prolactin variants act as antagonists at the prolactin
CC   receptor. Also provided is a cell-based assay system that can be used to
CC   identify compounds that modulate prolactin receptor activity.
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        799 TAGCAGCTGTTGTTGT 814
              |||||| |||||||||
Db          4 TAGCAGTTGTTGTTGT 19


RESULT 54
AAZ48621
ID   AAZ48621 standard; DNA; 20 BP.
XX
AC   AAZ48621;
XX
DT   03-MAR-2000  (first entry)
XX
DE   PCR primer for human prolactin gene.
XX
KW   PCR primer; prolactin; human; proliferation inhibitor; breast cancer;
KW   prostate cancer; prolactin receptor; therapy; proliferative disorder;
KW   apoptosis induction; therapy; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9958142-A1.
XX
PD   18-NOV-1999.
XX
PF   11-MAY-1999;   99WO-US10232.
XX
PR   12-MAY-1998;   98US-0085128.
PR   05-FEB-1999;   99US-0246041.
XX
PA   (CHEN/) CHEN W Y.
PA   (WAGN/) WAGNER T E.
XX
PI   Chen WY,  Wagner TE;
XX
DR   WPI; 2000-062263/05.
XX
PT   Use of human prolactin variants to treat breast or prostate cancer,
PT   methods of inducing apoptosis  -
XX
PS   Example; Page 30; 77pp; English.
XX
CC   This sequence represents a PCR primer for the human prolactin gene.
CC   The invention relates to a method of inhibiting the proliferation of a
CC   breast or prostate cancer cell which expresses a prolactin receptor
```

```
CC   comprises exposing the cell to an effective concentration of a variant of
CC   human prolactin having a substitution of the glycine at position 129 or a
CC   cell-free truncated prolactin receptor. The method is used to treat human
CC   breast and prostate cancer and proliferative disorders. The method is
CC   also useful for inducing apoptosis in cells expressing the prolactin
CC   receptor. The prolactin variants act as antagonists at the prolactin
CC   receptor. Also provided is a cell-based assay system that can be used to
CC   identify compounds that modulate prolactin receptor activity.
XX
SQ   Sequence 20 BP; 2 A; 2 C; 7 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        799 TAGCAGCTGTTGTTGT 814
              |||||| |||||||||
Db          4 TAGCAGTTGTTGTTGT 19


RESULT 55
AAZ38493
ID   AAZ38493 standard; DNA; 20 BP.
XX
AC   AAZ38493;
XX
DT   22-FEB-2000  (first entry)
XX
DE   Human microtubule-associated protein 4 (MAP4) antisense oligo #28.
XX
KW   Microtubule associated protein 4; MAP4; real-time quantitative PCR;
KW   expression; microtubule; assembly; function; cytoskeleton; structural;
KW   dynamic; stabilisation; lattice; overexpression; p53; oncogene; cancer;
KW   chemotherapy; tumour; drug sensitivity; antisense; therapy;
KW   hybridisation; inhibition; research; diagnostic; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag=  a
PT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages"
FT   modified_base    1..5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2' methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    1
FT                    /*tag=  c
FT                    /mod_base= m5c
FT   modified_base    16..20
FT                    /*tag=  d
FT                    /mod_base= OTHER
FT                    /note= "2' methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    18
FT                    /*tag=  e
FT                    /mod_base= m5c
XX
PN   US5998148-A.
XX
PD   07-DEC-1999.
XX
PF   08-APR-1999;   99US-0289368.
XX
PR   08-APR-1999;   99US-0289368.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Ackermann EJ;
XX
DR   WPI; 2000-052543/04.
XX
PT   Antisense oligonucleotides for inhibiting microtubule-associated
PT   protein 4 expression, useful in treating disorders associated with
PT   microtubule protein expression -
XX
PS   Claim 3; Column 39; 39pp; English.
XX
CC   This sequence represents a preferred antisense oligonucleotide targetted
CC   against the gene encoding human microtubule-associated protein 4
CC   (MAP4). Inhibition of MAP4 expression was measured by determination
CC   of MAP4 mRNA levels in a variety of cell lines via real-time
CC   quantitative PCR. The cell lines used included the bladder
CC   carcinoma cell line T-24, the human lung carcinoma cell line A549,
CC   human neonatal dermal fibroblasts and human embryonic keratinocytes.
CC   Microtubule-associated proteins comprise a group of proteins that mediate
CC   microtubule assembly and function which is required for cytoskeletal
CC   integrity. MAP4 is a member of the non-neuronal structural MAP family
CC   and is believed to affect microtubule dynamics by stabilising the
CC   microtubule lattice. MAP4 expression has been shown to be elevated in
CC   cells with mutant p53 oncogene expression, and is therefore linked to
CC   cancer chemotherapeutic drug sensitivity. These antisense molecules are
CC   useful for treating animals, particularly humans, having or being
CC   prone to a disease or condition associated with the expression of MAP4.
CC   The oligonucleotides are also useful for research and diagnostic
CC   applications.
XX
SQ   Sequence 20 BP; 1 A; 5 C; 6 G; 8 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        712 TTGCTGTGGGCCATCT 727
              || ||||||||||||
Db          4 TTTCTGTGGGCCATCT 19


RESULT 56
AAD49340/c
ID   AAD49340 standard; DNA; 20 BP.
XX
AC   AAD49340;
XX
DT   07-MAR-2003  (first entry)
XX
DE   Mouse phospholipid scramblase I antisense oligo, ISIS #120550.
XX
KW   Mouse; antisense; phospholipid scramblase I; immune disorder; cancer;
KW   inflammation; hyperproliferative; antisense therapy; phosphorothioate;
KW   ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate backbone"
FT   modified_base    1..5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    16..20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'methoxyethyl nucleotides"
FT   modified_base    2
FT                    /*tag=  d
FT                    /mod_base= m5c
FT   modified_base    5
FT                    /*tag=  e
FT                    /mod_base= m5c
FT   modified_base    7
```

```
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   16
FT                   /*tag=  h
FT                   /mod_base= m5c
XX
PN   WO200281495-A1.
XX
PD   17-OCT-2002.
XX
PF   02-APR-2002; 2002WO-US10529.
XX
PR   05-APR-2001; 2001US-0828344.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Wyatt JR;
XX
DR   WPI; 2003-058495/05.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding
PT   phospholipid scramblase I, for modulating gene expression and treating
PT   inflammation, immune disorders and hyperproliferative conditions e.g.
PT   cancer  -
XX
PS   Claim 3; Page 79; 131pp; English.
XX
CC   The invention relates to an antisense compound targetted to a nucleic
CC   acid molecule encoding phospholipid scramblase I and which specifically
CC   hybridises with and inhibits the expression of phospholipid scramblase I,
CC   or which hybridises with at least an 8-nucleobase portion of an active
CC   site on a nucleic acid molecule encoding phospholipid scramblase I. The
CC   invention is useful for inhibiting the expression of human phospholipid
CC   scramblase I in cells or tissues and for treating an animal having a
CC   disease or condition associated with phospholipid scramblase I, such as
CC   inflammation, an immune disorder and a hyperproliferative condition, e.g.
CC   cancer. The invention is useful for diagnostics, therapeutics and as
CC   research reagent. The present sequence is mouse phospholipid scramblase I
CC   antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        704 ACCCGAAATTGCTGTG 719
              || |||||||||||||
Db         20 ACTCGAAATTGCTGTG 5


RESULT 57
ABV76077/c
ID   ABV76077 standard; DNA; 20 BP.
XX
AC   ABV76077;
XX
DT   03-MAR-2003  (first entry)
XX
DE   Aspergillus niger antimicrobial polypeptide gene forward primer 93.
XX
KW   Antimicrobial; fungicide; antibacterial; infection; PCR; primer;
KW   ss.
XX
OS   Aspergillus niger.
XX
PN   WO200290384-A2.
XX
PD   14-NOV-2002.
XX
PF   03-MAY-2002; 2002WO-DK00289.
XX
PR   04-MAY-2001; 2001DK-0000706.
XX
PA   (NOVO ) NOVOZYMES AS.
XX
PI   Hansen MT;
XX
DR   WPI; 2003-111956/10.
XX
PT   New DNA construct comprising a DNA sequence encoding an anti-microbial
PT   polypeptide, useful as veterinarian or human therapeutic or
PT   prophylactic agent for treating or preventing bacterial or fungal
PT   infection  -
XX
PS   Example 1; Page 28; 45pp; English.
XX
CC   The present sequence is that of degenerate PCR primer 93, which was
CC   designed from an antifungal peptide of Aspergillus niger.  It is 1
CC   of 3 forward primers (see ABV76076-78) and 3 reverse primers (see
CC   ABV76079-81) based on the antifungal peptide that were used in an
CC   example from the invention.  Degeneration was used to cover most
CC   possibilities at the 3' end of the primers while the 5' ends were
CC   chosen on the basis of Aspergillus codon use.  PCR was performed on
CC   A. niger strain C-40-1 chromosomal DNA, and a DNA sequence (see
CC   ABV76075) encoding an antimicrobial polypeptide (see ABP58051) was
CC   obtained.  The isolated gene is used in a claimed DNA construct for
CC   the recombinant production of A. niger antimicrobial polypeptide in
CC   bacterial or fungal (especially Aspergillus oryzae or A. niger)
CC   cells.  The antimicrobial polypeptide is useful as a veterinary or
CC   human therapeutic or prophylactic agent for treatment or prevention
CC   of a bacterial or fungal infection (claimed), and can also be used
CC   in wound healing compositions or in bandages, catheters and
CC   anti-dandruff products.
XX
SQ   Sequence 20 BP; 8 A; 5 C; 1 G; 2 T; 4 other;

  Query Match             0.7%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   75.0%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        945 TAAGTGGTCCATGTGTTGTG 964
              ||: |:|| || ||||||||
Db         20 TARTTRGTRCARGTGTTGTG 1


RESULT 58
AAT76346
ID   AAT76346 standard; DNA; 19 BP.
XX
AC   AAT76346;
XX
DT   15-SEP-1997  (first entry)
XX
DE   Human fibronectin antisense oligonucleotide HUMFNA/HSFIB1AS14.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US09306.
XX
PR   07-JUN-1995;   95US-0474497.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Metzger WJ,  Nyce JW;
XX
```

```
DR   WPI; 1997-051871/05.
XX
PT   Treatment of airway diseases such as asthma - by topically applying
PT   adenosine-free antisense oligo:nucleotide to airway epithelium of
PT   subject
XX
PS   Claim 5; Page 36; 71pp; English.
XX
CC   A method for treating airway disease in a subject has been produced,
CC   which involves the topical administration of an essentially adenosine
CC   free antisense oligonucleotide (ON) to the airway epithelium of the
CC   subject. The present sequence is an antisense oligonucleotide
CC   HUMFNA/HSFIB1AS14 specific for the human fibronectin. The method can
CC   be used to treat airway diseases such as cystic fibrosis, asthma,
CC   chronic obstructive pulmonary disease, bronchitis and other
CC   airway diseases characterised by an inflammatory response. By
CC   eliminating adenosine from the antisense ON, its liberation upon
CC   antisense degradation is prevented, thereby preventing adenosine-
CC   induced bronchoconstriction in patients with hyper-reactive airways.
XX
SQ   Sequence 19 BP; 0 A; 7 C; 3 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        809 TGTTGTCCCTGCTGCCTTC 827
              ||||||| || ||||| ||
Db          1 TGTTGTCTCTTCTGCCCTC 19


RESULT 59
AAZ32742
ID   AAZ32742 standard; DNA; 19 BP.
XX
AC   AAZ32742;
XX
DT   31-JAN-2000  (first entry)
XX
DE   Primer T7 variant.
XX
KW   GRA1; GRA2; SAG1; MIC1, MAG1; protozoan; parasite; neosporosis; abortion;
KW   neonatal death; congenital infection; encephalitic disease; paralysis;
KW   pathogenic; antigen; excretory; secretory; modified cell; vaccine;
KW   differential; diagnosis; detection; antibody; screening;
KW   antisense therapy; PCR; primer; ss.
XX
OS   Synthetic.
OS   Bacteriophage t7.
XX
PN   EP953641-A2.
XX
PD   03-NOV-1999.
XX
PF   09-MAR-1999;   99EP-0301746.
XX
PR   26-MAR-1998;   98US-0079389.
PR   15-DEC-1998;   98US-0112282.
XX
PA   (PFIZ ) PFIZER PROD INC.
XX
PI   Brake DA,  Madura RA,  Durtschi BA,  Krishnan BR,  Yoder SC;
XX
DR   WPI; 1999-621834/54.
XX
PT   Polypeptides encoding Neospora caninum proteins, useful for vaccines
PT   against neosporosis and as diagnostic reagents -
XX
PS   Example; Page 24; 59pp; English.
XX
CC   This sequence represents a variant of primer T7, used with Neospora
CC   caninum MAG1 PCR primer bd252 (AAZ32741) in PCR to map one end of
CC   a lambda clone containing DNA encoding the Neospora caninum proteins
CC   MAG1 (AAY50134) and GRA1 (AAY50130). Neospora is a pathogenic protozoan
CC   parasite of mammals that is a major cause of abortion, neonatal death,
CC   congenital infection, and encephalitic disease. Neospora caninum infects
CC   dogs, and congenitally infects pups, often leading to paralysis.
CC   Neospora-related disease has also been reported in goats, sheep and
CC   horses. The invention relates to novel isolated Neospora caninum
CC   proteins GRA1, GRA2 (AAY50131), SAG1 (AAY50132), MIC1 (AAY50133)
CC   and MAG1 and the nucleotides which encode them. Genetic constructs
CC   comprising mutated or otherwise modified GRA1, GRA2, SAG1, MIC1 and/or
CC   MAG1 nucleotides can be used to disable or mutate the genes encoding
CC   these proteins. This method can be used to create a modified Neospora
CC   cell expressing GRA1, GRA2, SAG1, MIC1 and/or MAG1 proteins with altered
CC   function. The recombinant proteins, nucleotides encoding them or the
CC   modified Neospora cell may be used to prepare vaccines against
CC   neurosporosis. Such vaccines can be used to prevent abortion, neonatal
CC   death, congenital infection and encephalitic disease in mammals.
CC   The proteins or derived peptides can be used as diagnostic reagents to
CC   screen for Neospora specific antibodies in blood or serum samples, or as
CC   antigens to raise polyclonal or monoclonal antibodies used to screen for
CC   Neospora proteins in cell or tissue samples from mammals. GRA1, GRA2,
CC   SAG1, MIC1 and MAG1 nucleotides may be used in differential disease
CC   diagnosis or as antisense molecules.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        667 GAGGGTTTACTTTGCAGCG 685
              ||| |||| ||||||| ||
Db          1 GAGAGTTTGCTTTGCACCG 19


RESULT 60
AAX54148
ID   AAX54148 standard; DNA; 19 BP.
XX
AC   AAX54148;
XX
DT   05-JUL-1999  (first entry)
XX
DE   Human fibronectin antisense oligonucleotide fragment.
XX
KW   Antisense oligonucleotide; multiple target; antisense treatment;
KW   impaired respiration; inflammation; lung disease;
KW   pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW   acute asthma; allergy; asthma; impeded respiration;
KW   respiratory distress syndrome; pain; cystic fibrosis;
KW   pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW   chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW   colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW   hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW   prostate cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9913886-A1.
XX
PD   25-MAR-1999.
XX
PF   17-SEP-1998;   98WO-US19419.
XX
PR   09-JUN-1998;   98US-0093972.
PR   17-SEP-1997;   97US-0059160.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
```

```
PT   vasoconstriction
XX
PS   Disclosure; Page 55; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene
CC   initiation codons, genomic flanking regions, intron-exon borders, the
CC   5'-end, the 3'-end and the juxta-section between coding and non-coding
CC   regions and all segments of RNAs encoding proteins associated with one
CC   or more diseases, conditions or mixtures. The antisense oligonucleotides
CC   may be derived from sequences AAX55272-74. These multiple target
CC   oligonucleotides (specifically AAX55180-271) can be used for the
CC   antisense treatment of diseases and conditions. Typical diseases and
CC   conditions are those associated with impaired respiration and
CC   inflammation, including lung diseases, pulmonary vasoconstriction,
CC   inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded
CC   respiration, respiratory distress syndrome, pain, cystic fibrosis,
CC   pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic
CC   obstructive pulmonary disease (COPD), and cancers such as leukemias,
CC   lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer,
CC   pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma,
CC   hepatic metastases, as well as all types of cancers which may metastasize
CC   or have metastasized to the lungs, including breast and prostate cancer.
XX
SQ   Sequence 19 BP; 0 A; 7 C; 3 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        809 TGTTGTCCCTGCTGCCTTC 827
              ||||||| || ||||| ||
Db          1 TGTTGTCTCTTCTGCCCTC 19


RESULT 61
AAF19714
ID   AAF19714 standard; DNA; 19 BP.
XX
AC   AAF19714;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human fibronectin polynucleotide fragment #1281.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US08020.
XX
PR   06-APR-1999;   99US-0127958.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not
PT   trigger adenosine receptors during metabolism, useful e.g. for treating
PT   cancers and respiratory obstructions -
XX
PS   Claim 14; Page 220; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC   and/or surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention.
XX
SQ   Sequence 19 BP; 0 A; 7 C; 3 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        809 TGTTGTCCCTGCTGCCTTC 827
              ||||||| || ||||| ||
Db          1 TGTTGTCTCTTCTGCCCTC 19


RESULT 62
AAA85816
ID   AAA85816 standard; DNA; 19 BP.
XX
AC   AAA85816;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Cyclin B1 ribozyme binding site #145.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic;
KW   restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US28772.
XX
PR   04-DEC-1998;   98US-0110954.
XX
PA   (IMMU-) IMMUSOL INC.
XX
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PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1  -
XX
PS   Disclosure; Page 98; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells.
CC   The ribozyme is resistant to endonuclease activity and hence is
CC   efficient in restenosis treatment.
XX
SQ   Sequence 19 BP; 4 A; 1 C; 9 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        976 TGGAGATGTTGATTTTGAG 994
              ||||||  |||||| | |||
Db          1 TGGAGAGGTTGATGTCGAG 19


RESULT 63
AAA33592
ID   AAA33592 standard; DNA; 19 BP.
XX
AC   AAA33592;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1281.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US17712.
XX
PR   03-AUG-1998;   98US-0095212.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstriction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers  -
XX
PS   Claim 18; Page 425; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an
CC   antisense oligonucleotide (ON) with low adenosine (up to 15%), which
CC   targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC   asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of
CC   the ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC   185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC   differ from the previously named sequences. SEQ ID NO:11 to 1680
CC   (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC   invention. N.B. Sequences given in the disclosure of the present
CC   invention do not match up with their corresponding SEQ ID NO: sequences
CC   given in the sequence listing.
XX
SQ   Sequence 19 BP; 0 A; 7 C; 3 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        809 TGTTGTCCCTGCTGCCTTC 827
              |||||||  || |||||  ||
Db          1 TGTTGTCTCTTCTGCCCTC 19


RESULT 64
AAH60978
ID   AAH60978 standard; DNA; 19 BP.
XX
AC   AAH60978;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cyclin B1 ribozyme binding site SEQ ID NO:3402.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200130362-A2.
XX
PD   03-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-US29500.
XX
PR   26-OCT-1999;   99US-0161532.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Robbins JM,  Tritz R;
XX
DR   WPI; 2001-300427/31.
```

```
XX
PT   Treating proliferative skin or eye diseases and scarring, using
PT   ribozymes that cleave RNA encoding cytokines involved in inflammation,
PT   matrix metalloproteinases, growth factors and cell-cycle dependent
PT   kinases -
XX
PS   Example 1; Page 319; 408pp; English.
XX
CC   The present invention describes a method for treating a proliferative
CC   skin or eye disease and scarring. The method involves administering a
CC   ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC   inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC   dependent kinase, growth factor or a reductase, or administering a
CC   nucleic acid molecule (II) comprising a promoter operably linked to a
CC   nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC   dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC   ophthalmological, vulnerary, keratolytic and virucide activities, and
CC   cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC   in gene therapy. (I) and (II) are useful for treating proliferative
CC   skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC   squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC   also be used for treating proliferative eye diseases such as diabetic
CC   retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC   prematurity and retinal detachment, and for treating and preventing
CC   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC   scar. AAH57577 to AAH62099 represent sequences used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 19 BP; 4 A; 1 C; 9 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        976 TGGAGATGTTGATTTTGAG 994
              |||||| |||||| | |||
Db          1 TGGAGAGGTTGATGTCGAG 19


RESULT 65
ABQ81733
ID   ABQ81733 standard; DNA; 19 BP.
XX
AC   ABQ81733;
XX
DT   02-JAN-2003  (first entry)
XX
DE   Neospora caninum SAG1 related PCR primer SEQ ID NO 25.
XX
KW   Neospora caninum; virucide; antibacterial; microneme-associated 1; MIC1;
KW   vaccine; neosporosis; SAG1; PCR; primer; ss.
XX
OS   Neospora caninum.
XX
PN   EP1221487-A2.
XX
PD   10-JUL-2002.
XX
PF   09-MAR-1999; 2002EP-0002961.
XX
PR   26-MAR-1998;   98US-079389P.
PR   15-DEC-1998;   98US-112282P.
PR   09-MAR-1999;   99EP-0301746.
XX
PA   (PFIZ ) PFIZER PROD INC.
XX
PI   Brake DA,  Madura RA,  Durtschi BA,  Krishnan BR,  Yoder SC;
XX
DR   WPI; 2002-629646/68.
XX
PT   Novel isolated polypeptide from Neospora caninum microneme-associated
PT   protein, useful for preparing a vaccine against neosporosis  -
XX
PS   Claim 7; Page 24; 54pp; English.
XX
CC   The invention relates to a purified or isolated polypeptide (I) chosen
CC   from a Neospora caninum microneme-associated (MIC)1 protein, a
CC   polypeptide having an amino acid sequence that is homologous to MIC1
CC   protein, a polypeptide consisting of a portion of MIC1 protein (its
CC   homologue), their fusion protein, or analogue or derivative of the above
CC   sequences. Polynucleotides and proteins of the invention are useful for
CC   preparing a vaccine against neosporosis and other diseases or
CC   pathological conditions caused by bacteria or virus. The polynucleotide
CC   is useful for preparing modified N. caninum expressing a mutant form of
CC   MIC1. The present sequence is that of a N. caninum SAG1 related PCR
CC   primer of the invention.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        667 GAGGGTTTACTTTGCAGCG 685
              ||| |||| ||||||| ||
Db          1 GAGAGTTTGCTTTGCACCG 19


RESULT 66
ABQ82081
ID   ABQ82081 standard; DNA; 19 BP.
XX
AC   ABQ82081;
XX
DT   21-NOV-2002  (first entry)
XX
DE   Neospora caninum SAG1 PCR primer SEQ ID NO:25.
XX
KW   Neospora caninum; GRA1; GRA2; MIC1; SAG1; MAG1; vaccine; neosporosis;
KW   PCR primer; ss.
XX
OS   Neospora caninum.
OS   Synthetic.
XX
PN   EP1221485-A2.
XX
PD   10-JUL-2002.
XX
PF   09-MAR-1999; 2002EP-0002959.
XX
PR   26-MAR-1998;   98US-079389P.
PR   15-DEC-1998;   98US-112282P.
PR   09-MAR-1999;   99EP-0301746.
XX
PA   (PFIZ ) PFIZER PROD INC.
XX
PI   Brake DA,  Madura RA,  Durtschi BA,  Krishnan BR,  Yoder SC;
XX
DR   WPI; 2002-637831/69.
XX
PT   Novel Neospora caninum GRA2 protein useful for producing vaccines
PT   against neosporosis and as diagnostic reagents  -
XX
PS   Claim 7; Page 24; 54pp; English.
XX
CC   The present invention describes a substantially purified or isolated
CC   polypeptide (I) chosen from Neospora caninum GRA2 protein (I), a
CC   polypeptide with an amino acid sequence that is homologous to an
CC   N. caninum GRA2 protein, a polypeptide consisting of a portion of
CC   N. caninum GRA2 protein, or a polypeptide which is homologous to it, an
CC   analogue or derivative of (I), and a fusion protein comprising (I).
CC   (I) has protozoacide, virucide and antibacterial activities, and can be
CC   used in vaccines. (I) and a polynucleotide (II) molecule encoding (I) can
CC   be used for preparing a vaccine (III) against neosporosis. (III) can be
CC   used for vaccinating a mammal against neosporosis. (I) is useful as
CC   diagnostic reagents, to screen for Neospora-specific antibodies in blood
```

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CC   or serum samples from animals, or as antigens to raise polyclonal or
CC   monoclonal antibodies which are useful as diagnostic reagents and to
CC   screen for Neospora-specific proteins in cell, tissue or fluid samples
CC   from an animal. The present sequence represents a PCR primer for
CC   N. caninum SAG1, which is used in the exemplification of the present
CC   invention.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        667 GAGGGTTTACTTTGCAGCG 685
              ||| |||| ||||||| ||
Db          1 GAGAGTTTGCTTTGCACCG 19


RESULT 67
ABA00112
ID   ABA00112 standard; cDNA; 19 BP.
XX
AC   ABA00112;
XX
DT   15-NOV-2002  (first entry)
XX
DE   Primer NCSAG1320.
XX
KW   N. caninum; vaccine; neosporosis; surface antigen; SAG1; primer;
KW   Toxoplasma gondii; differential disease diagnosis; gene regulation;
KW   GRA1; GRA2; MIC1; MAG1; microneme-associated protein; PCR; amplify;
KW   Bradyzoite-specific antigen; electron dense granule; ss.
XX
OS   Neospora caninum.
XX
PN   EP1221486-A2.
XX
PD   10-JUL-2002.
XX
PF   09-MAR-1999; 2002EP-0002960.
XX
PR   26-MAR-1998;   98US-079389P.
PR   15-DEC-1998;   98US-112282P.
PR   09-MAR-1999;   99EP-0301746.
XX
PA   (PFIZ ) PFIZER PROD INC.
XX
PI   Brake DA,  Madura RA,  Durtschi BA,  Krishnan BR,  Yoder SC;
XX
DR   WPI; 2002-620673/67.
XX
PT   Novel Neospora caninum SAG1 protein useful for producing vaccines
PT   against neosporosis and as diagnostic reagents -
XX
PS   Claim 7; Page 24; 54pp; English.
XX
CC   The sequences given in ABA00101-21 are primers which were used in the
CC   isolation, amplification and sequencing of N. caninum cDNA's. The
CC   isolated cDNA's encode proteins which may be used in vaccines against
CC   neosporosis.  This primer was used to identify the SAG1 gene sequence.
CC   The Neospora proteins are useful as diagnostic reagents, to screen for
CC   Neospora-specific antibodies in blood or serum samples from animals, or
CC   as antigens to raise polyclonal or monoclonal antibodies which are
CC   useful as diagnostic reagents and to screen for Neospora-specific
CC   proteins in cell, tissue or fluid samples from an animal. Primers
CC   based on the protein coding sequences, are useful in amplification of
CC   Neospora-specific polynucleotide molecule for use, e.g. in differential
CC   disease diagnosis, or to encode or act as antisense molecules useful in
CC   gene regulation. The sequences of the polynucleotide molecules can also
CC   be used to design primers for use in isolating homologous genes from
CC   other species or strains of Neospora.
XX
SQ   Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 19;
  Best Local Similarity   84.2%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        667 GAGGGTTTACTTTGCAGCG 685
              ||| |||| ||||||| ||
Db          1 GAGAGTTTGCTTTGCACCG 19


RESULT 68
AAQ53124
ID   AAQ53124 standard; DNA; 20 BP.
XX
AC   AAQ53124;
XX
DT   03-JUN-1994  (first entry)
XX
DE   Gene detection sequence 48.
XX
KW   Gene detection; radio-isotopes; target gene; electrode;
KW   detection; optical fibre; hybridise; hybridisation; electrochemical;
KW   photochemical; electrolysis; probe; ss.
XX
OS   Synthetic.
XX
PN   JP05285000-A.
XX
PD   02-NOV-1993.
XX
PF   10-SEP-1992;   92JP-0242397.
XX
PR   13-FEB-1992;   92JP-0025621.
XX
PA   (TOKE ) TOSHIBA KK.
XX
DR   WPI; 1993-382240/48.
XX
PT   Detection method of gene without using radio-isotope - by
PT   hybridisation of nucleic acid probe which is single strand having
PT   complementary sequence of gene and single strand denatured sample
PT   DNA
XX
PS   Disclosure; Page 23; 26pp; Japanese.
XX
CC   The sequences (AAQ53077-Q53136) are used in the invention to detect
CC   specific genes without the use of radio-isotopes. Detection
CC   is carried out by hybridisation of denatured (ss) sample DNA with a
CC   (ss) nucleic acid probe, complementary to the target sequence.
CC   Hybridisation occurs on the surface of an electrode or optical fibre
CC   and detection is visualised by the addition of an entity that
CC   recognises (ds) hybridised DNA and is electrochemically /
CC   photochemically active.
XX
SQ   Sequence 20 BP; 2 A; 2 C; 10 G; 6 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        795 GATGTAGCAGCTGTTGTTG 813
              | || |||||||| |||||
Db          1 GTTGGAGCAGCTGGTGTTG 19


RESULT 69
AAV20060/c
ID   AAV20060 standard; DNA; 20 BP.
XX
AC   AAV20060;
XX
DT   06-JUL-1998  (first entry)
XX
```

```
DE   N-ras probe 682C.
XX
KW   Probe; N-ras; mutation detection; mismatch binding protein;
KW   cancer diagnosis; single strand binding protein; ss.
XX
OS   Synthetic.
XX
PN   WO9745555-A1.
XX
PD   04-DEC-1997.
XX
PF   22-MAY-1997;   97WO-SE00839.
XX
PR   29-MAY-1996;   96SE-0002062.
XX
PA   (PHAA ) PHARMACIA BIOTECH AB.
XX
PI   Goto M,  Hasebe M,  Tosu M;
XX
DR   WPI; 1998-130209/12.
XX
PT   Method for detecting mutation(s) by mismatch binding protein  -
PT   useful for separating mutation from non-mutated target
PT   polynucleotide in sample, used in early diagnosis of cancer
XX
PS   Disclosure; Page 9; 24pp; English.
XX
CC   This sequence represents a probe for the N-ras gene, that can be
CC   used in the method of the invention. The method is for for detecting a
CC   mutation from a non-mutated sequence of a target polynucleotide (TP) in a
CC   sample, by using a mismatch binding protein (MBP), comprises:
CC   (a) providing a non-mutated and mutated TP; (b) forming duplex of the
CC   non-mutated and mutated single strands of TP in (a); (c) adding a single
CC   strand binding protein to the polynucleotide from (b); (d) incubating MBP
CC   with an activating agent; (e) adding the incubated MBP from (d) to the
CC   polynucleotide from (c), so that MBP binds to the duplex formed by one
CC   non-mutated and one mutated single strand of TP; and (f) detecting the
CC   presence of any MBP bound to TP. The method may be used for early
CC   diagnosis of cancer. Binding of MBP to single strands is inhibited by the
CC   single strand binding protein. By activating MBP with an activator,
CC   before addition to the sample, binding to double strands lacking
CC   mismatches does not take place.
XX
SQ   Sequence 20 BP; 6 A; 10 C; 2 G; 2 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        795 GATGTAGCAGCTGTTGTTG 813
              | || |||||||| |||||
Db         20 GTTGGAGCAGCTGGTGTTG 2


RESULT 70
AAA66403/c
ID   AAA66403 standard; DNA; 20 BP.
XX
AC   AAA66403;
XX
DT   09-OCT-2000  (first entry)
XX
DE   Dog genomic marker oligonucleotide sequence SEQ ID NO:265.
XX
KW   Dog; genome; genomic marker; radiation hybrid map; identification;
KW   chromosome location; gene marker; polymorphic microsatellite marker;
KW   phenotype; behaviour; pedigree; ss.
XX
OS   Canis familiaris.
XX
PN   WO200029615-A2.
XX
PD   25-MAY-2000.
XX
PF   15-NOV-1999;   99WO-IB01907.
XX
PR   13-NOV-1998;   98US-0108193.
XX
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Galibert F,  Andre C;
XX
DR   WPI; 2000-387821/33.
XX
PT   New radiation hybrid map of the dog, Canine familiaris, genome, useful
PT   for e.g. identifying genes implicated in phenotypic and behavioral
PT   traits or in genetic diseases and for studying dog pedigrees  -
XX
PS   Claim 1; Page 64; 87pp; English.
XX
CC   The present invention describes a radiation hybrid map of the dog
CC   (Canine familiaris) genome comprising the genome location of a marker
CC   selected from AAA66139 to AAA66942. The radiation hybrid map is useful
CC   for identifying and localising dog genes, since it covers approximately
CC   80 % of the dog genome and provides a dense map integrating different
CC   types (i.e. Type I and Type II) of markers. The map and the dog genome
CC   markers (or complementary sequences) are especially useful to identify
CC   genes responsible for phenotypic and behavioural traits in dogs, to
CC   identify morbid genes, to analyse diseases and identify implicated genes
CC   in such diseases and their alleles, and to study dog pedigrees. They
CC   may also be useful for isolating corresponding human gene sequences
CC   e.g. genes involved in genetic diseases.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        917 AATGAGAAAAGAGAGGATG 935
              ||||| |||||  ||||||
Db         20 AATGACAAAAGCCAGGATG 2


RESULT 71
AAZ94263
ID   AAZ94263 standard; DNA; 20 BP.
XX
AC   AAZ94263;
XX
DT   03-JUL-2000  (first entry)
XX
DE   Human ELF5 specific reverse PCR primer.
XX
KW   ELF5; human; ETS protein; transcription factor; cell proliferation;
KW   cell differentiation; therapy; diagnosis; cancer; tumour;
KW   autoimmune disease; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200012695-A1.
XX
PD   09-MAR-2000.
XX
PF   26-AUG-1999;   99WO-AU00691.
XX
PR   27-AUG-1998;   98AU-0005512.
PR   30-SEP-1998;   98AU-0006252.
XX
PA   (MONU ) UNIV MONASH.
XX
PI   Kola I,  Zhou J;
XX
DR   WPI; 2000-270820/23.
XX
PT   ELF5 protein, useful for diagnosis, antibody generation and as
```

```
PT   screening tool for agents capable of modulating transcriptional events
PT   during cellular functioning such as in tumorigenesis, comprises an ETS
PT   domain  -
XX
PS   Example 10; Page 58; 114pp; English.
XX
CC   The present sequence is a human ELF5 specific reverse PCR primer that
CC   was used in STS content mapping.  ELF5 (see AAY79288) belongs to the
CC   ETS family of transcription factors.  The identification of human and
CC   murine ELF5s in the present invention permits the identification
CC   and rational design of products for use in therapy, diagnosis and
CC   antibody generation involving, e.g., regulation of cellular
CC   functional activity such as cellular differentiation or cellular
CC   proliferation.  These therapeutic molecules may also act as either
CC   agonists or antagonists of ELF5 function and will be useful in
CC   cancer and autoimmune disease therapy.
XX
SQ   Sequence 20 BP; 1 A; 3 C; 8 G; 8 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        960 TTGTGTGCAGCTGTTGTGG 978
              ||||||| | |||| |||
Db          2 TTGTGTGCGGATGTTCTGG 20


RESULT 72
AAD15561
ID   AAD15561 standard; DNA; 20 BP.
XX
AC   AAD15561;
XX
DT   15-NOV-2001  (first entry)
XX
DE   Brome mosaic virus (BMV) 35kDa protein target DNA #3.
XX
KW   Brome mosaic virus; BMV; 35kDa protein; genetic disease; therapeutic;
KW   antisense target; ss.
XX
OS   Brome mosaic virus.
XX
PN   WO200161030-A2.
XX
PD   23-AUG-2001.
XX
PF   14-FEB-2001; 2001WO-US04732.
XX
PR   14-FEB-2000; 2000US-0504653.
XX
PA   (BOLL/) BOLLON A P.
PA   (GRAY/) GRAY D M.
PA   (JUSE/) JU-SEOG L.
XX
PI   Bollon AP,  Gray DM,  Ju-Seog L;
XX
DR   WPI; 2001-529916/58.
XX
PT   Selecting optimal subsequence antisense targets for inhibition of mRNA
PT   expression of target mRNA for the therapeutic treatment of genetic
PT   disease -
XX
PS   Example 3; Page 22; 87pp; English.
XX
CC   The invention relates to a method for selecting optimal subsequence
CC   antisense targets. The method involves preparing an antisense
CC   oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC   sequences, as well as antisense oligonucleotides capable of binding DNA.
CC   The antisense and antigene libraries are useful for preparing therapeutic
CC   agents for the treatment of genetic disease. The present DNA sequence is
CC   Brome mosaic virus (BMV) 35kDa protein target DNA related to the
CC   invention.
CC   Note: The present sequence is shown as DNA in the specification; however,
CC   in vivo, this target sequence would be mRNA.
XX
SQ   Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        889 CCCATGTCTACCAAAGTTT 907
              || ||||||| || |||||
Db          1 CCGATGTCTAACATAGTTT 19


RESULT 73
AAD15562/c
ID   AAD15562 standard; DNA; 20 BP.
XX
AC   AAD15562;
XX
DT   15-NOV-2001  (first entry)
XX
DE   BMV 35kDa protein gene targetted antisense oligonucleotide #3.
XX
KW   Brome mosaic virus; BMV; 35kDa protein; genetic disease; therapeutic;
KW   antisense; phosphorothioate backbone; ss.
XX
OS   Brome mosaic virus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
XX
PN   WO200161030-A2.
XX
PD   23-AUG-2001.
XX
PF   14-FEB-2001; 2001WO-US04732.
XX
PR   14-FEB-2000; 2000US-0504653.
XX
PA   (BOLL/) BOLLON A P.
PA   (GRAY/) GRAY D M.
PA   (JUSE/) JU-SEOG L.
XX
PI   Bollon AP,  Gray DM,  Ju-Seog L;
XX
DR   WPI; 2001-529916/58.
XX
PT   Selecting optimal subsequence antisense targets for inhibition of mRNA
PT   expression of target mRNA for the therapeutic treatment of genetic
PT   disease -
XX
PS   Example 3; Page 22; 87pp; English.
XX
CC   The invention relates to a method for selecting optimal subsequence
CC   antisense targets. The method involves preparing an antisense
CC   oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC   sequences, as well as antisense oligonucleotides capable of binding DNA.
CC   The antisense and antigene libraries are useful for preparing therapeutic
CC   agents for the treatment of genetic disease. The present DNA sequence is
CC   phosphorothioate antisense oligonucleotide which is targetted to Brome
CC   mosaic virus (BMV) 35kDa protein gene.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        889 CCCATGTCTACCAAAGTTT 907
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                || ||||||| || |||||
Db         20 CCGATGTCTAACATAGTTT 2


RESULT 74
AAS09015
ID   AAS09015 standard; DNA; 20 BP.
XX
AC   AAS09015;
XX
DT   26-SEP-2001  (first entry)
XX
DE   Human SAP140 intron 15-exon 16 boundary genomic sequence.
XX
KW   Human; 140kDa Shc associated protein; SAP140; tyrosine phosphatase Lyp1;
KW   chromosome 9; haematopoietic; B-cell; T-cell;acute myeloid leukaemia;
KW   AML; acute lymphoblastic leukaemia; ALL; hyperproliferation; cancer;
KW   autoimmune disorder; apoptosis; allergic disorder; immunosuppression; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   intron          1..12
FT                   /*tag=  a
FT                   /partial
FT                   /number= 15
FT   exon            13..20
FT                   /*tag=  b
FT                   /partial
FT                   /number= 16
XX
PN   WO200151509-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-CA00023.
XX
PR   10-JAN-2000; 2000US-0175233.
XX
PA   (HOSP-) HOSPITAL FOR SICK CHILDREN.
XX
PI   Roifman CM,  Sharfe N;
XX
DR   WPI; 2001-442133/47.
XX
PT   New Shc associated protein, useful for identifying modulators for
PT   treating cancer  -
XX
PS   Example 3; Fig 4B; 106pp; English.
XX
CC   The present sequence represents the human SAP140 intron 15-exon 16
CC   boundary genomic sequence. Human 140kDa Shc associated protein
CC   (SAP140; AAU03596) is a novel non-transmembrane protein which is
CC   isolated by binding to the human cytoplasmic tyrosine phosphatase Lyp1.
CC   The gene encoding for SAP140 maps to chromosome 9. SAP140 is useful for
CC   identifying compounds which can bind and modulate SAP140 protein
CC   activity. Compounds which inhibit or induce SAP140 expression or activity
CC   are useful for modulating the expression/activity of SAP140 to modulate
CC   the activity of haematopoietic cells, such as a B- or T-cells, preferably
CC   leukaemic cells. SAP140 can be used for the treatment of acute myeloid
CC   leukaemia (AML), acute lymphoblastic leukaemia (ALL), uncontrolled T-cell
CC   diseases, haematopoietic disorders (e.g. lymphomas) and
CC   hyperproliferation disorders (e.g. cancer). Modulators of SAP140 are
CC   useful in modulating disorders such as neoplasia and autoimmunity, to
CC   stimulate cell death or apoptosis, and to induce cell proliferation for
CC   treatment of autoimmune diseases (e.g. multiple sclerosis, lupus,
CC   arthritis, diabetes) and allergic disorders (e.g. asthma). Modulators of
CC   SAP140 regulatory pathways are also useful for treating a disorder which
CC   requires immunosuppression such as transplantation.
XX
SQ   Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        893 TGTCTACCAAAGTTTACAA 911
                ||| | |||||| ||||||
Db          2 TGTTTTCCAAAGGTTACAA 20


RESULT 75
AAF77260/c
ID   AAF77260 standard; DNA; 20 BP.
XX
AC   AAF77260;
XX
DT   22-MAY-2001  (first entry)
XX
DE   Alpha-mannosidase II C-terminal specific PCR primer Q.
XX
KW   Yeast; variant; och1; mnn1; mnn4; glycoprotein; alpha-mannosidase II;
KW   PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO200114522-A1.
XX
PD   01-MAR-2001.
XX
PF   16-AUG-2000; 2000WO-JP05474.
XX
PR   19-AUG-1999;   99JP-0233215.
XX
PA   (KIRI ) KIRIN BEER KK.
PA   (AGEN ) AGENCY OF IND SCI & TECHNOLOGY.
XX
PI   Chiba Y,  Kainuma M,  Takeuchi M,  Kawashima E,  Yoshida S,  Yamano S;
PI   Jigami Y,  Ishii T,  Shimma Y;
XX
DR   WPI; 2001-218436/22.
XX
PT   Yeast variants capable of efficiently producing glycoproteins with
PT   mammalian cell-based neutral sugar chain with excellent purity,
PT   obtained by sugar engineering, applicable e.g. in drug compositions for
PT   medical treatment  -
XX
PS   Example 7; Page 35; 83pp; Japanese.
XX
CC   This invention relates to a yeast variant which contains och1, mnn1 and
CC   mnn4 mutations, which can produce a glycoprotein that contains an
CC   asparagine bound type sugar chain with an oligosaccharide chain. The
CC   invention includes a method for producing alpha-mannosidase II by
CC   culturing the yeast strain to accumulate the product for isolation from
CC   the cultured material. The sugar chains and glycoproteins are applicable
CC   like erythropoietin, cytokines, and tissue plasminogen-activating factor
CC   in drug compositions for medical treatment and in other fields such as
CC   science and in industry. The present sequence represents a PCR primer
CC   specific for the alpha-mannosidase II C-terminal DNA, the primer is used
CC   in the production of the yeast strain of the invention.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        697 TTGCTGTACCCGAAATTGC 715
                |||||||| || ||| |||
Db         20 TTGCTGTATCCCAAACTGC 2


RESULT 76
AAD44827/c
ID   AAD44827 standard; DNA; 20 BP.
XX
```

```
AC   AAD44827;
XX
DT   13-DEC-2002  (first entry)
XX
DE   Human raf kinase related antisense oligonucleotide #6.
XX
KW   Raf kinase; hyperproliferation; neovascularisation; ocular angiogenesis;
KW   therapy; cancer; cytostatic; anti-angiogenic; vascular; ophthalmological;
KW   antisense; ss.
XX
OS   Unidentified.
XX
PN   US6410518-B1.
XX
PD   25-JUN-2002.
XX
PF   18-FEB-2000; 2000US-0506073.
XX
PR   31-MAY-1994;   94US-0250856.
PR   31-MAY-1995;   95WO-US07111.
PR   26-NOV-1996;   96US-0756806.
PR   07-JUL-1997;   97US-0888982.
PR   06-JUL-1998;   98WO-US13961.
PR   28-AUG-1998;   98US-0143214.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP;
XX
DR   WPI; 2002-597918/64.
XX
PT   Treating cancer, angiogenesis or neovascularization by administering
PT   antisense oligonucleotides targeted to human raf sequences  -
XX
PS   Disclosure; Column 57; 41pp; English.
XX
CC   The present invention relates to novel antisense oligonucleotides which
CC   are targetted to nucleic acids encoding human raf proteins and capable
CC   of inhibiting raf expression. The invention also relates to methods of
CC   inhibiting hyperproliferation of cells which involves contacting the
CC   hyperproliferating cells with a therapeutically effective amount of
CC   an oligonucleotide of the invention. The method is useful for treating
CC   cancer, angiogenesis or neovascularisation, especially ocular
CC   angiogenesis or neovascularisation. The present DNA sequence is
CC   human raf kinase related antisense oligonucleotide.
XX
SQ   Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        977 GGAGATGTTGATTTTGAGA 995
              ||| |||||||||| | ||
Db         19 GGACATGTTGATTTCGGGA 1


RESULT 77
ABT32335/c
ID   ABT32335 standard; DNA; 20 BP.
XX
AC   ABT32335;
XX
DT   08-MAY-2003  (first entry)
XX
DE   Neuroblastoma-related oligonucleotide #112.
XX
KW   Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;
KW   high malignancy.
XX
OS   Unidentified.
XX
PN   WO200297093-A1.
XX
PD   05-DEC-2002.
XX
PF   30-MAY-2002; 2002WO-JP05294.
XX
PR   30-MAY-2001; 2001JP-0162775.
PR   24-AUG-2001; 2001JP-0255226.
XX
PA   (CHIB-) CHIBA PREFECTURE.
PA   (HISM ) HISAMITSU PHARM CO LTD.
XX
PI   Nakagawara A;
XX
DR   WPI; 2003-140476/13.
XX
PT   Nucleic acids having higher expression in human neuroblastoma with poor
PT   prognosis for diagnostic prediction of neuroblastoma prognosis -
XX
PS   Example 5; Page 26; 111pp; Japanese.
XX
CC   The invention comprises nucleic acids that show increased expression in
CC   human neuroblastomas with poor prognosis over those with a good
CC   prognosis. The nucleic acids of the invention are useful as a tool for
CC   distinguishing neuroblastomas with a favourable prognosis (spontaneous
CC   regression) from neuroblastomas with a poor prognosis (high malignancy).
CC   The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in
CC   an example of the invention.
XX
SQ   Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 other;

  Query Match             0.7%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1014 AGTGTGTGGTTGGCAAAAT 1032
              ||| ||||| |||||| ||
Db         19 AGTCTGTGGCTGGCAAGAT 1


RESULT 78
ABZ77613/c
ID   ABZ77613 standard; cDNA; 19 BP.
XX
AC   ABZ77613;
XX
DT   03-JUN-2003  (first entry)
XX
DE   PCR primer used to amplify a fragment of the insulin gene.
XX
KW   Insulin-secreting cell; pancreatic cell; islet duodenal homeobox-1;
KW   IDX-1; glucagon-like peptide-1; GLP-1; insulin secretion; glucose;
KW   diabetes; PCR; primer; ss.
XX
OS   Rattus sp.
XX
PN   WO2003012084-A2.
XX
PD   13-FEB-2003.
XX
PF   25-JUL-2002; 2002WO-US23857.
XX
PR   02-AUG-2001; 2001US-0920868.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Perfetti R;
XX
DR   WPI; 2003-278399/27.
XX
PT   New insulin-secreting cell line, useful to test the efficacy of drugs
PT   that stimulate insulin secretion, or to develop new diabetes
PT   treatments, comprises islet duodenal homeobox-1 (IDX-1) cDNA and
PT   culturing in glucagon-like peptide-1 (GLP-1) -
```

```
XX
PS   Example; Page 22; 57pp; English.
XX
CC   The specification describes an insulin-secreting cell, comprising a
CC   pancreatic cell transfected with islet duodenal homeobox-1 (IDX-1)
CC   cDNA and cultured in glucagon-like peptide-1 (GLP-1). The cell exhibits
CC   a dose-dependent response of insulin secretion when exposed to glucose.
CC   The insulin-secreting cells and cell lines are useful for investigating
CC   the function and development of pancreatic cells, to test the efficacy
CC   of drugs that stimulate insulin secretion, or to develop new approaches
CC   to treat diabetes. PCR primers ABZ77612-13 were used to amplify a
CC   fragment of the insulin gene. The primers were used to test the effect
CC   of GLP-1 on pancreatic cells, in the course of the invention.
XX
SQ   Sequence 19 BP; 5 A; 6 C; 4 G; 4 T; 0 other;

  Query Match             0.7%;  Score 14;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        876 TTCAGACTTGGCAC 889
              ||||||||||||||
Db         19 TTCAGACTTGGCAC 6


RESULT 79
ABZ70453/c
ID   ABZ70453 standard; DNA; 20 BP.
XX
AC   ABZ70453;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human TREM-2 forward PCR primer.
XX
KW   Human; TREM-2; triggering receptor expressed on myeloid cell;
KW   receptor; immunosuppressive; antiallergic; gene therapy; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   CA2342376-A1.
XX
PD   20-SEP-2002.
XX
PF   28-MAR-2001; 2001CA-2342376.
XX
PR   20-MAR-2001; 2001US-277238P.
XX
PA   (COLO/) COLONNA M.
PA   (BOUC/) BOUCHON A.
XX
PI   Colonna M,  Bouchon A;
XX
DR   WPI; 2003-094220/09.
XX
PT   New nucleic acid molecule encoding a triggering receptor expressed on
PT   myeloid cells (TREM)-1 or TREM-2 polypeptide, useful for treating or
PT   ameliorating a disease or condition in a subject associated with TREM
PT   .
XX
PS   Example 6.2; Page 78; 163pp; English.
XX
CC   The present sequence is a forward PCR primer for novel human
CC   TREM-2 (triggering receptor expressed on myeloid cells) cDNA (see
CC   ABZ70450).  TREM-2 (see also ABP72426) is a transmembrane protein
CC   expressed selectively on peripheral dendritic cells (DCs) but not
CC   on granulocytes or monocytes.  DC stimulation via TREM-2 leads to
CC   DC maturation and resistance to apoptosis, and induces strong
CC   upregulation of CCR7 and subsequent chemotaxis toward macrophage
CC   inflammatory protein 3.  TREM-2 polypeptides and the polynucleotides
CC   encoding them can be used to modulate host immune responses in
CC   various immune disorders, including autoimmune disease and allergic
CC   disease.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 other;

  Query Match             0.7%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        921 AGAAAAGAGAGGAT 934
              ||||||||||||||
Db         16 AGAAAAGAGAGGAT 3


RESULT 80
AAX71584/c
ID   AAX71584 standard; RNA; 17 BP.
XX
AC   AAX71584;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #596.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 115; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 7 A; 2 C; 4 G; 4 U; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        894 GTCTACCAAAGTTTACA 910
              |||| |||||||||  ||
Db         17 GTCTTCCAAAGTTTTCA 1
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RESULT 81
AAX71585/c
ID   AAX71585 standard; RNA; 17 BP.
XX
AC   AAX71585;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #597.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 115; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 8 A; 2 C; 4 G; 3 U; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        893 TGTCTACCAAAGTTTAC 909
              ||||| |||||||||| |
Db         17 TGTCTTCCAAAGTTTTC 1


RESULT 82
ABK02935
ID   ABK02935 standard; RNA; 17 BP.
XX
AC   ABK02935;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Hammerhead ribozyme #234.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 30; Page 143; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
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CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is a hammerhead ribozyme of the invention.
XX
SQ   Sequence 17 BP; 2 A; 3 C; 5 G; 7 U; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   52.9%;  Pred. No. 1.1e+02;
  Matches    9;  Conservative    6;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        799 TAGCAGCTGTTGTTGTC 815
              :||||||:  :|::|:|
Db          1 UAGCAGCUUGUGUUGUC 17


RESULT 83
ABK03302
ID   ABK03302 standard; RNA; 17 BP.
XX
AC   ABK03302;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Inozyme #253.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 30; Page 150; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is an inozyme of the invention.
XX
SQ   Sequence 17 BP; 2 A; 2 C; 6 G; 7 U; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   52.9%;  Pred. No. 1.1e+02;
  Matches    9;  Conservative    6;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        798 GTAGCAGCTGTTGTTGT 814
              |:||||||:  :|::|:
Db          1 GUAGCAGCUUGUGUUGU 17


RESULT 84
ABN07621
ID   ABN07621 standard; DNA; 17 BP.
XX
AC   ABN07621;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7613.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
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PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 7613; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        730 ACCTTTTACCTTGAGGA 746
              |||| | ||||||||||
Db          1 ACCTGTGACCTTGAGGA 17


RESULT 85
ABN07622
ID   ABN07622 standard; DNA; 17 BP.
XX
AC   ABN07622;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7614.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 7614; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        731 CCTTTTACCTTGAGGAT 747
              ||| | ||||||||||
Db          1 CCTGTGACCTTGAGGAT 17


RESULT 86
AAQ41645
ID   AAQ41645 standard; DNA; 18 BP.
XX
AC   AAQ41645;
XX
DT   25-MAR-2003  (updated)
DT   02-SEP-1993  (first entry)
XX
DE   Alpha factor-lys-arg screening oligomer.
```

XX
KW Isolation; alpha factor; GRF; fusion; pYSV201; pAO203; pUC18;
KW alpha mating-factor; alphaMF; prepro; signal; sequence;
KW processsing site; P. pastoris; AOX1; terminator; yeast; secretion;
KW Kunitz; protease; inhibitor; KPI; ss.
XX
OS Synthetic.
XX
PN WO9309233-A2.
XX
PD 13-MAY-1993.
XX
PF 30-OCT-1992; 92WO-US09400.
XX
PR 31-OCT-1991; 91US-0785638.
XX
PA (SALK) SALK INST BIOTECHNOLOGY IND ASSOC.
XX
PI Wagner SL, Siegel R, Thill GP, Harpold MM, Comer WT;
XX
DR WPI; 1993-167698/20.
XX
PT Recombinant amyloid precursor protein inhibitor domain and DNA -
PT regulates protease activity, for treating coagulation disorders and
PT diseases characterised by amyloidosis
XX
PS Disclosure; Page 49; 105pp; English.
XX
CC The sequences given in AAQ41645-46 are fragments that were used in the
CC isolation of mutated alpha-mating factor (alphaMF) sequence. The
CC isolated sequence was used in the formation of plasmid pAO203. pAO203
CC is a pUC18-based plasmid comprising the S. cerevisiae alphaMF prepro
CC signal sequence, the lys-arg(glu-ala)2 processsing sites, the GRF gene
CC and the P. pastoris AOX1 terminator. pAO203 was used to attach a
CC yeast-specific secretion signal to a sythetic gene. The synthetic
CC gene used was a Kunitz-type protease inhibitor (KPI).
CC (Updated on 25-MAR-2003 to correct PN field.)
CC (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 18 BP; 7 A; 0 C; 6 G; 5 T; 0 other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 920 GAGAAAAGAGAGGATGT 936
|| |||||||||| |||
Db 1 GATAAAAGAGAGGTTGT 17

RESULT 87
AAZ71313
ID AAZ71313 standard; DNA; 18 BP.
XX
AC AAZ71313;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:5669.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB00822.
XX
PR 21-APR-1998; 98US-0082614.
PR 23-NOV-1998; 98US-0109732.
XX
PA (GEST) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome -
XX
PS Claim 8; Page 1439; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the
CC invention have a variety of uses: they can be used for high density
CC mapping of the human genome, and in complex association studies and
CC haplotyping studies which are useful in determining the genetic basis
CC for disease states. Compositions and methods of the invention can also
CC be useful for the identification of the targets for the development of
CC pharmaceutical agents and diagnostic methods, as well as the
CC characterisation of the differential efficacious responses to and side
CC effects from pharmaceutical agents acting on a disease as well as other
CC treatment.
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297
CC and 3367, are not actually given a sequence in the Sequence Listing
CC from the present invention.
XX
SQ Sequence 18 BP; 7 A; 0 C; 8 G; 3 T; 0 other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1048 TGGAATTTTGAGAGAGG 1064
||||| ||||||||||
Db 1 TGGAAAATTGAGAGAGG 17

RESULT 88
AAC63796/c
ID AAC63796 standard; DNA; 18 BP.
XX
AC AAC63796;
XX
DT 07-MAR-2001 (first entry)
XX
DE Bovine Flk-1 mRNA antisense phosphorothioate oligonucleotide AS2-Flk.
XX
KW Bovine; Flk-1; vascular endothelial growth factor; VEGF; VEGF receptor;
KW anti-angiogenic; VEGF receptor inhibitor; Flt-1; phosphorothioate;
KW antisense inhibition; ss.
XX
OS Bos sp.
XX
PN CA2268379-A1.
XX
PD 21-OCT-2000.
XX
PF 21-APR-1999; 99CA-2268379.
XX
PR 21-APR-1999; 99CA-2268379.
XX
PA (FOND-) FONDS RECH INST CARDIOLOGIE.
XX
PI Sirois MG;
XX
DR WPI; 2001-062055/08.
XX

```
PT   Use of the vascular endothelial growth factor receptor inhibitory
PT   ligand or nucleic acid encoding the receptor as anti-angiogenic agent
PT   -
XX
PS   Disclosure; Page 5; 29pp; English.
XX
CC   The present sequence is an oligonucleotide which was used to discriminate
CC   the contribution of vascular endothelial growth factor (VEGF) receptors
CC   Flt-1 and Flk-1 upon stimulation of endothelial cells by VEGF. Inhibitor
CC   ligands directed against a receptor of VEGF or against its coding
CC   sequence are useful as anti-angiogenic agents.
XX
SQ   Sequence 18 BP; 2 A; 8 C; 1 G; 7 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TGAGAAAAGAGAGGATG 935
              ||||||||||| ||| |
Db         17 TGAGAAAAGAGTGGAGG 1


RESULT 89
ABL58519/c
ID   ABL58519 standard; DNA; 18 BP.
XX
AC   ABL58519;
XX
DT   12-AUG-2002  (first entry)
XX
DE   Bovine FLK-1 mRNA targeting antisense oligo AS2-bFlk-1.
XX
KW   Vascular epidermal growth factor; VEGF; Flt-1; Flk-1; cytostatic;
KW   antiinflammatory; antidiabetic; ophthalmological; antiarthritic;
KW   antipsoriatic; antiarteriosclerotic; antisense; ss.
XX
OS   Synthetic.
OS   Bos sp.
XX
PN   CA2321189-A1.
XX
PD   13-APR-2002.
XX
PF   13-OCT-2000; 2000CA-2321189.
XX
PR   13-OCT-2000; 2000CA-2321189.
XX
PA   (SIRO/) SIROIS M G.
XX
PI   Sirois MG;
XX
DR   WPI; 2002-436228/47.
XX
PT   New antisense oligonucleotides useful for e.g. reducing pathological
PT   angiogenesis, directed against the vascular epidermal growth factor
PT   receptors Flt-1 or Flk-1  -
XX
PS   Example 1; Page 29; 63pp; English.
XX
CC   The invention relates to antisense oligonucleotides (AON) complementary
CC   to a gene that encodes a mammalian vascular epidermal growth factor
CC   (VEGF) receptors Flt-1 or Flk-1. The AON can inhibit the expression of
CC   the VEGF receptors Flt-1 or Flk-1. The  AON are useful for reducing
CC   pathological angiogenesis and, where directed against Flk-1, synthesis
CC   of platelet-activating factor. They are used for treating inflammation,
CC   tumours, metastases, ocular diseases (diabetic or perinatal hyperoxic
CC   retinopathy or age-related macular degeneration), arthritis, psoriasis
CC   and arteriosclerosis. (AON) are also useful for research and diagnosis,
CC   particular for specific detection of Flt-1 or Flk-1. The present sequence
CC   represents an antisense oligo directed against the bovine FLK-1 mRNA.
XX
SQ   Sequence 18 BP; 2 A; 8 C; 1 G; 7 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TGAGAAAAGAGAGGATG 935
              ||||||||||| ||| |
Db         17 TGAGAAAAGAGTGGAGG 1


RESULT 90
ABL60470/c
ID   ABL60470 standard; DNA; 18 BP.
XX
AC   ABL60470;
XX
DT   12-AUG-2002  (first entry)
XX
DE   Bovine Flk-1 mRNA targeting antisense oligo AS2-bFlk-1.
XX
KW   Vascular epidermal growth factor; VEGF; Flt-1; Flk-1; cytostatic;
KW   antiinflammatory; anti-angiogenic; ophthalmological; antiarthritic;
KW   antibacterial; dermatological; antiarteriosclerotic; antisense; ss.
XX
OS   Synthetic.
OS   Bos sp.
XX
PN   WO200231141-A2.
XX
PD   18-APR-2002.
XX
PF   15-OCT-2001; 2001WO-CA01427.
XX
PR   13-OCT-2000; 2000US-0687239.
XX
PA   (CARD-) INST CARDIOLOGIE MONTREAL.
XX
PI   Sirois MG;
XX
DR   WPI; 2002-444180/47.
XX
PT   New antisense oligonucleotide complementary to a gene encoding a
PT   mammalian vascular endothelial growth factor receptor comprising Flt-1
PT   and Flk-1, for reducing e.g. inflammation, pathological angiogenesis,
PT   ocular diseases  -
XX
PS   Example 1; Page 14; 98pp; English.
XX
CC   The invention relates to antisense oligonucleotides, complementary to a
CC   gene that encodes a mammalian vascular epidermal growth factor (VEGF)
CC   receptors Flt-1 or Flk-1, and can inhibit the expression of the VEGF
CC   receptors Flt-1 or Flk-1. The antisense oligonucleotides may be used to
CC   reduce VEGP-induced inflammation and angiogenesis, e.g. pathological
CC   angiogenesis, in mammals, tumour growth and metastasis, ocular diseases
CC   (diabetic and perinatal hyperoxic retinopathies, age-related macular
CC   degeneration), arthritis, psoriasis, and atherosclerosis. The antisense
CC   compounds may further be used as research reagents and diagnostics, and
CC   to reduce platelet activating factor (PAF) synthesis and inflammation.
CC   The present sequence represents an antisense oligo directed against the
CC   bovine Flk-1 mRNA.
XX
SQ   Sequence 18 BP; 2 A; 8 C; 1 G; 7 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        919 TGAGAAAAGAGAGGATG 935
              ||||||||||| ||| |
Db         17 TGAGAAAAGAGTGGAGG 1


RESULT 91
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```
ABK31549
ID   ABK31549 standard; DNA; 18 BP.
XX
AC   ABK31549;
XX
DT   23-APR-2002  (first entry)
XX
DE   Oligonucleotide probe #2 for signal transduction associated gene, AR.
XX
KW   Human; signal transduction associated gene; cytosine methylation state;
KW   CpG island; signal transduction associated disease; solid tumour; cancer;
KW   antitumour; cytostatic; probe; AR; ss.
XX
OS   Homo sapiens.
XX
PN   WO200200926-A2.
XX
PD   03-JAN-2002.
XX
PF   29-JUN-2001; 2001WO-EP07472.
XX
PR   30-JUN-2000; 2000DE-1032529.
PR   01-SEP-2000; 2000DE-1043826.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2002-147896/19.
XX
PT   Oligonucleotide for diagnosis and therapy of diseases associated with
PT   signal transduction e.g. cancer, comprises chemically modified genomic
PT   sequences of genes associated with signal transduction  -
XX
PS   Example 1; Page 14; 24pp; English.
XX
CC   The present invention relates to chemically modified DNA sequences of
CC   signal transduction associated genes. The DNA sequences are chemically
CC   modified using a solution of bisulphite, hydrogen sulphite or
CC   disulphite. Also disclosed are oligonucleotides and/or PNA oligomers
CC   for detecting the cytosine methylation state (CpG islands) of these
CC   genes, and a method for the diagnosis and/or therapy of genetic and
CC   epigenetic parameters of genes associated with signal transduction.
CC   The genomic DNA can be obtained from cells or cellular components which
CC   contain DNA, e.g. cell lines, biopsies, blood, sputum, stool, urine,
CC   cerebral-spinal fluid, tissue embedded in paraffin such as tissue from
CC   eyes, intestine, kidney, brain, heart, prostate, lung, breast or liver,
CC   histologic object slides, and all their possible combinations. The
CC   sequences of the invention are useful for the diagnosis and therapy of
CC   diseases associated with signal transduction e.g. solid tumours and
CC   cancer. The present sequence represents an oligonucleotide probe which
CC   is used to determine the methylation state of the signal transduction
CC   associated gene, AR.
XX
SQ   Sequence 18 BP; 4 A; 0 C; 6 G; 8 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1048 TGGAATTTTGAGAGAGG 1064
              ||  |||||||||||||
Db          1 TGTTATTTTGAGAGAGG 17


RESULT 92
ABZ81757/c
ID   ABZ81757 standard; DNA; 18 BP.
XX
AC   ABZ81757;
XX
DT   11-JUN-2003  (first entry)
XX
DE   Huntington's disease exon 1 triplet repeat sequence.
XX
KW   Huntington's disease; nootropic; anticonvulsant; huntingtin;
KW   human; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003013437-A2.
XX
PD   20-FEB-2003.
XX
PF   07-AUG-2002; 2002WO-US25352.
XX
PR   07-AUG-2001; 2001US-310757P.
PR   08-AUG-2001; 2001US-310770P.
PR   08-AUG-2001; 2001US-310889P.
PR   04-DEC-2001; 2001US-337219P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Parekh-Olmedo H;
XX
DR   WPI; 2003-247928/25.
XX
PT   New single stranded oligonucleotides comprising a DNA domain having at
PT   least one mismatch with respect to the genetic sequence of the
PT   Huntington's disease gene to be altered, useful for treating or
PT   preventing Huntington's disease  -
XX
PS   Example 1; Page 57; 133pp; English.
XX
CC   The present sequence is an example of a poly-glutamine triplet
CC   repeat region found in exon 1 of the Huntington's disease (HD)
CC   gene.  The invention is based on the discovery that
CC   oligonucleotides can be designed to target sequence alterations
CC   to the triplet repeat region of the HD gene.  Preferred
CC   oligonucleotides are single-stranded, have at least one mismatch
CC   with respect to the HD gene region to be altered, and have
CC   chemical modifications, or are chimeric RNA/DNA oligonucleotides.
CC   They can be used for the treatment or prevention of HD.
XX
SQ   Sequence 18 BP; 9 A; 6 C; 3 G; 0 U; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 18;
  Best Local Similarity   88.2%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        797 TGTAGCAGCTGTTGTTG 813
              ||| || ||||||||||
Db         17 TGTTGCTGCTGTTGTTG 1


RESULT 93
ABZ10414
ID   ABZ10414 standard; DNA; 18 BP.
XX
AC   ABZ10414;
XX
DT   16-JAN-2003  (first entry)
XX
DE   Haematopoietic cell proliferation disorder related oligonucleotide #554.
XX
KW   Human; haematopoietic cell proliferation disorder; cytostatic;
KW   gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW   cytosine methylation state; probe; primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200277272-A2.
XX
PD   03-OCT-2002.
XX
```

PF 26-MAR-2002; 2002WO-EP03401.
XX
PR 26-MAR-2001; 2001US-278333P.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;
PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T;
PI Pelet C, Schwope I, Ziebarth H;
XX
DR WPI; 2003-018942/01.
XX
PT Detecting and differentiating between hematopoietic cell proliferative
PT disorders, comprises contacting a target nucleic acid with a reagent
PT that distinguishes between methylated and non-methylated CpG
PT dinucleotides -
XX
PS Claim 15; Page 42; 117pp; English.
XX
CC The present invention describes a method for detecting and
CC differentiating between haematopoietic cell proliferative disorders
CC associated with at least 1 gene and/or their regulatory regions in a
CC subject. The method comprises contacting a target nucleic acid in a
CC biological sample obtained from the subject with at least 1 reagent,
CC which distinguishes between methylated and non-methylated CpG
CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC represent specifically claimed nucleotide sequences from the present
CC invention. Oligonucleotides from the present invention can be used: for
CC differentiating between healthy haematopoietic cells and proliferative
CC disorder haematopoietic cells; for differentiating between acute
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC determining the cytosine methylation state and/or single nucleotide
CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC related sequences and their complements; and as primers for the
CC amplification of haematopoietic cell proliferation disorder related
CC DNA sequences. The nucleotide sequences from the present invention can
CC also be used for detecting a predisposition to, differentiation between
CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC haematopoietic cell proliferative disorders. The present method enables
CC a highly specific classification of haematopoietic cell proliferative
CC disorders allowing for improved and informed treatment of patients.
XX
SQ Sequence 18 BP; 4 A; 0 C; 6 G; 8 T; 0 other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1048 TGGAATTTTGAGAGAGG 1064
|| |||||||||||||
Db 1 TGTTATTTTGAGAGAGG 17

RESULT 94
ABZ10996/c
ID ABZ10996 standard; DNA; 18 BP.
XX
AC ABZ10996;
XX
DT 16-JAN-2003 (first entry)
XX
DE Haematopoietic cell proliferation disorder related oligonucleotide #1136.
XX
KW Human; haematopoietic cell proliferation disorder; cytostatic;
KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW cytosine methylation state; probe; primer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200277272-A2.
XX

PD 03-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-EP03401.
XX
PR 26-MAR-2001; 2001US-278333P.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;
PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T;
PI Pelet C, Schwope I, Ziebarth H;
XX
DR WPI; 2003-018942/01.
XX
PT Detecting and differentiating between hematopoietic cell proliferative
PT disorders, comprises contacting a target nucleic acid with a reagent
PT that distinguishes between methylated and non-methylated CpG
PT dinucleotides -
XX
PS Claim 15; Page 74; 117pp; English.
XX
CC The present invention describes a method for detecting and
CC differentiating between haematopoietic cell proliferative disorders
CC associated with at least 1 gene and/or their regulatory regions in a
CC subject. The method comprises contacting a target nucleic acid in a
CC biological sample obtained from the subject with at least 1 reagent,
CC which distinguishes between methylated and non-methylated CpG
CC dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC represent specifically claimed nucleotide sequences from the present
CC invention. Oligonucleotides from the present invention can be used: for
CC differentiating between healthy haematopoietic cells and proliferative
CC disorder haematopoietic cells; for differentiating between acute
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC determining the cytosine methylation state and/or single nucleotide
CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC related sequences and their complements; and as primers for the
CC amplification of haematopoietic cell proliferation disorder related
CC DNA sequences. The nucleotide sequences from the present invention can
CC also be used for detecting a predisposition to, differentiation between
CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC haematopoietic cell proliferative disorders. The present method enables
CC a highly specific classification of haematopoietic cell proliferative
CC disorders allowing for improved and informed treatment of patients.
XX
SQ Sequence 18 BP; 8 A; 6 C; 0 G; 4 T; 0 other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1048 TGGAATTTTGAGAGAGG 1064
|| |||||||||||||
Db 18 TGTTATTTTGAGAGAGG 2

RESULT 95
AAA84266
ID AAA84266 standard; DNA; 19 BP.
XX
AC AAA84266;
XX
DT 04-DEC-2000 (first entry)
XX
DE Cyclin D1 ribozyme binding site #33.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic;
KW restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX

```
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US28772.
XX
PR   04-DEC-1998;   98US-0110954.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1  -
XX
PS   Disclosure; Page 74; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells.
CC   The ribozyme is resistant to endonuclease activity and hence is
CC   efficient in restenosis treatment.
XX
SQ   Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        844 AGCTCCTCCTGGTGTAC 860
              |||| ||||||||| ||
Db          3 AGCTGCTCCTGGTGAAC 19


RESULT 96
AAD14643/c
ID   AAD14643 standard; DNA; 19 BP.
XX
AC   AAD14643;
XX
DT   01-NOV-2001  (first entry)
XX
DE   DEN-1 PDK-13 virus mRNA amplifying RT-PCR forward amplimer D1V-2752.
XX
KW   Flavivirus; Dengue virus-1; DEN-1; vaccine; infection; virucidal;
KW   avirulent; immunogenic; viral disease; pharmaceutical; RT-PCR primer; ss.
XX
OS   Dengue virus type I.
XX
PN   WO200160847-A2.
XX
PD   23-AUG-2001.
XX
PF   16-FEB-2001; 2001WO-US05142.
XX
PR   16-FEB-2000; 2000US-0182829.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Kinney RM,  Kinney CYH,  Butrapet S,  Gubler DL,  Bhamarapravati N;
XX
DR   WPI; 2001-497162/54.
XX
PT   Chimeric flaviviruses that are avirulent and immunogenic, useful for
PT   vaccinating against a range of dengue viruses -
XX
PS   Disclosure; Page 88; 470pp; English.
XX
CC   The invention relates to avirulent, immunogenic flavivirus chimeras
CC   comprising amino acid mutations in the non-structural proteins of a
CC   flavivirus. Chimeric viruses containing the attenuation-mutated non-
CC   structural genes of the virus are used as a backbone into which the
CC   structural protein genes of a second flavivirus strain are inserted.
CC   These chimeric viruses elicit pronounced immunogenicity but lack the
CC   accompanying clinical symptoms of viral disease. Attenuated chimeric
CC   flaviviruses are combined in a pharmaceutical composition to confer
CC   simultaneous immunity against several strains of pathogenic flaviviruses
CC   such as dengue virus serotypes DEN-1, DEN-2, DEN-3 and DEN-4. Immunogenic
CC   flavivirus chimeras are also used as immunogens or multivalent vaccines
CC   to confer simultaneous protection against infections. The present DNA
CC   sequence is a RT (reverse transcriptase)-PCR amplimer which is used for
CC   amplifying the cDNA amplicon amplified from the viral genomic DEN-1 RNA
CC   template. The primer is used for diagnosing dengue-1 (DEN-1) PDK-13
CC   vaccine virus-specific genetic mutation at genome nucleotide position
CC   2782.
XX
SQ   Sequence 19 BP; 7 A; 8 C; 3 G; 1 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        948 GTGGTCCATGTGTTGTG 964
              ||| |||||| ||||||
Db         19 GTGTTCCATGGGTTGTG 3


RESULT 97
AAH59428
ID   AAH59428 standard; DNA; 19 BP.
XX
AC   AAH59428;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cyclin D1 ribozyme binding site SEQ ID NO:1852.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200130362-A2.
XX
PD   03-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-US29500.
XX
PR   26-OCT-1999;   99US-0161532.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Robbins JM,  Tritz R;
XX
DR   WPI; 2001-300427/31.
XX
PT   Treating proliferative skin or eye diseases and scarring, using
PT   ribozymes that cleave RNA encoding cytokines involved in inflammation,
PT   matrix metalloproteinases, growth factors and cell-cycle dependent
PT   kinases -
XX
PS   Example 1; Page 206; 408pp; English.
XX
```

```
CC   The present invention describes a method for treating a proliferative
CC   skin or eye disease and scarring. The method involves administering a
CC   ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC   inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC   dependent kinase, growth factor or a reductase, or administering a
CC   nucleic acid molecule (II) comprising a promoter operably linked to a
CC   nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC   dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC   ophthalmological, vulnerary, keratolytic and virucide activities, and
CC   cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC   in gene therapy. (I) and (II) are useful for treating proliferative
CC   skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC   squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC   also be used for treating proliferative eye diseases such as diabetic
CC   retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC   prematurity and retinal detachment, and for treating and preventing
CC   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC   scar. AAH57577 to AAH62099 represent sequences used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        844 AGCTCCTCCTGGTGTAC 860
              |||| ||||||||| ||
Db          3 AGCTGCTCCTGGTGAAC 19


RESULT 98
ABA98268
ID   ABA98268 standard; DNA; 19 BP.
XX
AC   ABA98268;
XX
DT   18-JUN-2002  (first entry)
XX
DE   Primer 34 for sequencing of pcu.
XX
KW   PHBA; para-Hydrobenzoate; liquid crystal polymer; LCP;
KW   toluene monooxygenase; TMO; pcu gene; p-cresol; PCR primer; ss.
XX
OS   Pseudomonas mendocina KR-1.
XX
PN   WO200192539-A2.
XX
PD   06-DEC-2001.
XX
PF   22-MAY-2001; 2001WO-US16574.
XX
PR   01-JUN-2000; 2000US-0585174.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Ben-Bassat A,  Cattermole M,  Gatenby AA,  Gibson KJ;
PI   Ramos-Gonzales MI,  Ramos JL,  Sariaslani S;
XX
DR   WPI; 2002-171436/22.
XX
PT   New nucleic acid fragments encoding bacterial toluene monooxygenase
PT   enzyme pathway, useful for isolating genes encoding proteins from the
PT   same or other microbial species, and for producing para-hydroxybenzoate
PT    -
XX
PS   Example 1; Page 78; 97pp; English.
XX
CC   The invention relates to an isolated nucleic acid fragment encoding a
CC   bacterial toluene monooxygenase enzyme pathway. The nucleic acid
CC   fragments of the invention may be used to isolate genes encoding
CC   proteins from the same or other microbial species. Bacterial strains
CC   transformed with the p-cresol utilizing (pcu) genes are useful for
CC   producing para-hydroxybenzoate (PHBA) which can be used for
CC   synthesizing liquid crystal polymers (LCP). The sequences given in
CC   ABA98235-ABA98331 represent primers for; pcu sequencing, cloning of the
CC   P. putida pchC gene, sequencing tmoX, cloning pcu for insertion into
CC   pMC3, construction of plasmids pPCUR1 and 2, mapping the transcript
CC   initiation site of tmoX, and the identification of pobA and B genes.
XX
SQ   Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 other;

  Query Match             0.7%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        699 GCTGTACCCGAAATTGC 715
              || |||||||||| ||||
Db          2 GCCGTACCCGAAGTTGC 18


RESULT 99
ABL89198/c
ID   ABL89198 standard; DNA; 19 BP.
XX
AC   ABL89198;
XX
DT   22-MAY-2002  (first entry)
XX
DE   HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:420.
XX
KW   Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW   reverse transcriptase; binding group; ss.
XX
OS   Human immunodeficiency virus type 1.
OS   Synthetic.
XX
PN   EP1174518-A1.
XX
PD   23-JAN-2002.
XX
PF   20-JUL-2000; 2000EP-0202611.
XX
PR   20-JUL-2000; 2000EP-0202611.
XX
PA   (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
PI   Loukachov VV,  Van Gemen B,  Goudsmit J;
XX
DR   WPI; 2002-156696/21.
XX
PT   Collection of binding groups for determining or typing samples,
PT   especially clinical samples, has groups capable to identify essentially
PT   all members of the family of nucleic acids of relatively high
PT   significance  -
XX
PS   Disclosure; Page 109; 166pp; English.
XX
CC   The present invention describes a collection of binding groups for a
CC   family of nucleic acids comprising members of relative high and relative
CC   low significance, where the binding groups are selected to be capable to
CC   identify, alone or in combination, essentially all members of the family
CC   of nucleic acids of relatively high significance. The collection of
CC   binding groups is useful for typing of nucleic acid in a clinical sample,
CC   by contacting the nucleic acid with the collection and determining
CC   whether one or more binding groups bound to the nucleic acid of the
CC   sample. This method is useful for determining whether the sample
CC   comprises at least a part of a member of relatively high significance of
CC   a family of nucleic acids. The collection of binding groups is useful for
CC   diagnosing the severity of a disease caused by a pathogen containing a
CC   member of a family of nucleic acids. ABL88779 to ABL89321 represent
CC   oligonucleotide sequences used in the exemplification of the present
CC   invention.
XX
SQ   Sequence 19 BP; 7 A; 4 C; 3 G; 5 T; 0 other;
```

```
  Query Match             0.7%;  Score 13.8;  DB 1;  Length 19;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        946 AAGTGGTCCATGTGTTG 962
              |||| ||||||| |||
Db         19 AAGTCGTCCATGTATTG 3


RESULT 100
AAF47736/c
ID   AAF47736 standard; DNA; 15 BP.
XX
AC   AAF47736;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1156.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 7; Page 51; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 1 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 1e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        903 AGTTTACAATTCAAA 917
              ||||||| |||||||
Db         15 AGTTTACCATTCAAA 1


RESULT 101
AAF47737/c
ID   AAF47737 standard; DNA; 15 BP.
XX
AC   AAF47737;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1157.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 7; Page 51; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 1 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 1e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        902 AAGTTTACAATTCAA 916
              ||||||| ||||||
Db         15 AAGTTTACCATTCAA 1
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```
RESULT 102
AAT43215/c
ID   AAT43215 standard; cDNA; 16 BP.
XX
AC   AAT43215;
XX
DT   28-JAN-1997  (first entry)
XX
DE   Primer P4 for phosphotriesterase-related protein coding sequence.
XX
KW   Phosphotriesterase-related protein; mouse; PRP; recessive cpk; murine;
KW   polycystic kidney disease; PKD; acute renal injury; autosomal dominant;
KW   autosomal recessive; fluid-filled cyst; nephron; collecting duct; kidney;
KW   renal parenchyma; renal failure; mammal; diagnostic marker; therapy; PCR;
KW   acute organophosphate toxicity; phosphotriesterase inhibitor; amplify;
KW   anti-cancer drug enhancer; anti-HIV drug enhancer; primer;
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   US5552313-A.
XX
PD   03-SEP-1996.
XX
PF   21-NOV-1994;   94US-0343027.
XX
PR   21-NOV-1994;   94US-0343027.
XX
PA   (UNIV ) UNIV KANSAS.
XX
PI   Calvet JP,  Hou X,  Magenheimer BS,  Maser RL;
XX
DR   WPI; 1996-412067/41.
XX
PT   Mouse phospho:tri:esterase-related protein DNA - used to develop
PT   prods. for diagnosis of poly:cystic kidney disease or acute renal
PT   failure
XX
PS   Example 4; Column 8; 23pp; English.
XX
CC   AAT43211-T43220 represent amplification primers for the coding sequence
CC   for the mouse phosphotriesterase-related protein (mPRP).  This sequence
CC   is identical to nucleotides 765-780 of the full length mPRP coding
CC   sequence (see AAT43210).  The mPRP sequence has abnormal underexpression
CC   in the recessive cpk murine model of polycystic kidney disease (PKD), and
CC   has decreased expression following acute renal injury.  PKD is a common
CC   disease (affecting 1 in 500-1000 individuals) and can be inherited as an
CC   autosomal dominant, or as an autosomal recessive.  PKD is characterised
CC   by the development of innumerable, large, fluid-filled cysts from the
CC   nephrons and collecting ducts of affected kidneys.  It is thought that
CC   enlargement of the cysts interferes with functioning of the normal renal
CC   parenchyma, which eventually leads to renal failure.  The mPRP, or other
CC   similar mammalian PRPs can be used as diagnostic markers for PKD and
CC   acute renal failure.  The PRPs can also be used in therapeutic and
CC   protective treatments, such as for acute organophosphate toxicity.  They
CC   can also be used to develop products to enhance the effectiveness of
CC   other types of therapy, e.g. phosphotriesterase inhibitors to enhance
CC   the effectiveness of certain anti-cancer, or anti-HIV drugs.
XX
SQ   Sequence 16 BP; 7 A; 5 C; 2 G; 2 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 1.2e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        970 CTGTTGTGGAGATGT 984
              ||||| |||||||||
Db         16 CTGTTTTGGAGATGT 2


RESULT 103
AAF02431
ID   AAF02431 standard; DNA; 17 BP.
XX
AC   AAF02431;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #726.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 72; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 12 A; 2 C; 2 G; 1 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.3e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        914 CAAAATGAGAAAAGA 928
              ||||||  ||||||||
Db          3 CAAAATAAGAAAAGA 17


RESULT 104
AAF02993
ID   AAF02993 standard; DNA; 17 BP.
XX
AC   AAF02993;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1288.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
```

```
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 85; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 7 A; 0 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.3e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1048 TGGAATTTTGAGAGA 1062
              |||||| ||||||||
Db          3 TGGAATATTGAGAGA 17


RESULT 105
ABT34374/c
ID   ABT34374 standard; DNA; 17 BP.
XX
AC   ABT34374;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 11.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 35; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 5 A; 2 C; 3 G; 7 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 17;
  Best Local Similarity   93.3%;  Pred. No. 1.3e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        909 CAATTCAAAATGAGA 923
              ||||||||||| ||
Db         17 CAATTCAAAATGTGA 3


RESULT 106
AAZ70132
ID   AAZ70132 standard; DNA; 18 BP.
XX
AC   AAZ70132;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker upstream amplification primer SEQ ID NO:4488.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB00822.
XX
PR   21-APR-1998;   98US-0082614.
PR   23-NOV-1998;   98US-0109732.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome  -
XX
PS   Claim 8; Page 1188; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
```

```
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the
CC   invention have a variety of uses: they can be used for high density
CC   mapping of the human genome, and in complex association studies and
CC   haplotyping studies which are useful in determining the genetic basis
CC   for disease states. Compositions and methods of the invention can also
CC   be useful for the identification of the targets for the development of
CC   pharmaceutical agents and diagnostic methods, as well as the
CC   characterisation of the differential efficacious responses to and side
CC   effects from pharmaceutical agents acting on a disease as well as other
CC   treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297
CC   and 3367, are not actually given a sequence in the Sequence Listing
CC   from the present invention.
XX
SQ   Sequence 18 BP; 1 A; 6 C; 3 G; 8 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 18;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        846 CTCCTCCTGGTGTAC 860
              ||||||||||| |||
Db          2 CTCCTCCTGGTTTAC 16


RESULT 107
AAT28506/c
ID   AAT28506 standard; DNA; 19 BP.
XX
AC   AAT28506;
XX
DT   01-APR-1997  (first entry)
XX
DE   P. aeruginosa detection primer #3.
XX
KW   Detection; probe; amplification primer; bacterial pathogen; pneumonia;
KW   Escherichia coli; Klebsiella pneumoniae; Pseudomonas aeruginosa;
KW   Proteus mirabilis; Streptococcus pneumoniae; Staphylococcus aureus;
KW   Staphylococcus epidermidis; Enterococcus faecalis; respiratory tract;
KW   Staphylococcus saprophyticus; Streptococcus pyogenes; urinary tract;
KW   Haemophilus influenzae; Moraxella catarrhalis; septicaemia; meningitis;
KW   infection; intra-abdominal infection; skin infection;
KW   bacterial resistance; beta-lactam antibiotic; ss.
XX
OS   Synthetic.
XX
PN   WO9608582-A2.
XX
PD   21-MAR-1996.
XX
PF   12-SEP-1995;   95WO-CA00528.
XX
PR   12-SEP-1994;   94US-0304732.
XX
PA   (BERG/) BERGERON M G.
PA   (OUEL/) OUELLETTE M.
PA   (ROYP/) ROY P H.
XX
PI   Bergeron MG,  Ouellette M,  Roy PH;
XX
DR   WPI; 1996-179953/18.
XX
PT   Method for the detection of bacterial species using probes and
PT   primers  - allows detection and quantification of antibiotic
PT   resistant bacteria in patients, the environment and food
XX
PS   Claim 38; Page 46; 216pp; English.
XX
CC   The sequences given in AAT28504-07 represent primers which were used in
CC   the method of the invention for the detection of P. aeruginosa in a
CC   sample.  The method comprises using probes and/or amplification primers
CC   which are specific, ubiquitous and sensitive for determining the
CC   presence and/or amount of nucleic acids from selected bacterial species
CC   in any sample, where the bacterial nucleic acid comprises a selected
CC   target region hybridisable with the probes or primers.  The method
CC   comprises contacting the sample with the probes or primers and detecting
CC   the presence and/or amount of hybridised primers or amplification
CC   products as and indication of the presence and/or amount of the
CC   bacterial species.  This method may be used to detect commonly
CC   encountered bacterial pathogens, e.g. Escherichia coli, Klebsiella
CC   pneumoniae, Pseudomonas aeruginosa, Proteus mirabilis, Streptococcus
CC   pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis,
CC   Enterococcus faecalis, Staphylococcus saprophyticus, Streptococcus
CC   pyogenes, Haemophilus influenzae and Moraxella catarrhalis.  These
CC   bacterial species are associated with approx. 90% of urinary tract
CC   infections and with a high percentage of other severe infections
CC   including septicaemia, meningitis, pneumonia, intra-abdominal infections,
CC   skin infections and other severe respiratory tract infections.  The
CC   method may also be used to evaluate a bacterial resistance to
CC   beta-lactam antibiotics.  This sequence specifically binds to bases
CC   1423-1441 of the sequence given in AAT28491.
XX
SQ   Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1003 TCTTGATGAACAGTG 1017
              ||||||||||||| |
Db         16 TCTTGATGAACAGCG 2


RESULT 108
AAA72197/c
ID   AAA72197 standard; DNA; 19 BP.
XX
AC   AAA72197;
XX
DT   06-DEC-2000  (first entry)
XX
DE   Mouse retinoid X receptor-gamma gene exon E5 RT-PCR primer.
XX
KW   Mouse retinoid X receptor-gamma gene; RXR-gamma; exon E5;
KW   DNA binding domain; murine; transgenic animal; RXR-gamma knockout mouse;
KW   drug screening; reverse transcription-PCR; RT-PCR primer; ss.
XX
OS   Mus sp.
XX
PN   US6093873-A.
XX
PD   25-JUL-2000.
XX
PF   19-AUG-1997;   97US-0914256.
XX
PR   19-AUG-1996;   96US-0024175.
XX
PA   (INRM ) INST NAT SANTE & RECH MEDICALE.
PA   (CNRS ) CENT NAT RECH SCI.
PA   (UYPA-) UNIV PASTEUR LOUIS.
PA   (BRIM ) BRISTOL-MYERS SQUIBB CO.
XX
PI   Chambon P,  Kastner P;
XX
DR   WPI; 2000-531490/48.
XX
PT   New genetically engineered mice containing alterations in the gene
PT   encoding retinoid X receptor, useful for identifying agonists and
PT   antagonists of the receptors and in studying retinoic acid mediated
PT   gene expression  -
XX
PS   Example 2; Column 12; 20pp; English.
XX
CC   The invention relates to a retinoid X receptor-gamma (RXR-gamma)
CC   knockout mouse whose germ and somatic cells contain an insertion of an
```

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CC   exogenous DNA within the portions of the RXR-gamma gene (exons 3 and 4)
CC   which encode the entire DNA binding domain of RXR-gamma. The knockout
CC   mouse is deficient in the normal expression of RXR-gamma. The invention
CC   encompasses mice which are either homozygous or heterozygous for the
CC   defective RXR-gamma gene, and also encompasses mammalian particularly
CC   murine, cell lines which are homozygous or heterozygous for a RXR-gamma
CC   gene containing an exogenous DNA insert within exons 3 and 4. The
CC   invention additionally relates to methods of identifying RXR-gamma
CC   agonists or antagonists using the transgenic mouse or mammalian cell
CC   line. The genetically engineered mouse and cell line are useful in
CC   identifying agonists and antagonists of specific members of the RAR/RXR
CC   class of receptors. The mouse and cell line allow the investigation at
CC   both the cellular and in vivo levels of a system that lacks one or more
CC   specific isoforms of RXR-gamma . This capability will allow the
CC   establishment of the importance of each of the RXR-gamma and its
CC   isoforms in animal development and physiology. They are useful in
CC   studying any aspect of retinoic acid-mediated gene expression and
CC   tissue specific expression of various RXR-gamma receptors. Sequences
CC   AAA72195-A72197 represent mouse RXR-gamma reverse transcription-PCR
CC   (RT-PCR) primers used in the analysis of RNAs from the transgenic mice
CC   of the invention. The present sequence is an RT-PCR primer for exon E5
CC   of the mouse RXR-gamma gene.
XX
SQ   Sequence 19 BP; 4 A; 6 C; 5 G; 4 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        706 CCGAAATTGCTGTGG 720
              ||||| |||||||||
Db         18 CCGAACTTGCTGTGG 4


RESULT 109
ABA76909/c
ID   ABA76909 standard; DNA; 19 BP.
XX
AC   ABA76909;
XX
DT   28-JAN-2002  (first entry)
XX
DE   Pseudomonas aeruginosa PCR primer SEQ ID NO 85.
XX
KW   Detection; bacterial species; animal; food; environment; PCR primer;
KW   antibiotic resistance; ss.
XX
OS   Pseudomonas aeruginosa.
XX
PN   NZ501596-A.
XX
PD   29-JUN-2001.
XX
PF   12-SEP-1995;   95NZ-0501596.
XX
PR   12-SEP-1995;   95NZ-0501596.
XX
PA   (IDII-) IDI INFECTIO DIAGNOSTIC INC.
XX
PI   Bergeron MG,  Ouellette M,  Roy PH;
XX
DR   WPI; 2001-615034/71.
XX
PT   Method for detecting target bacterial species in a sample, comprises
PT   detecting the presence or amount of bacterial nucleic acid amplified by
PT   a primer derived from bacterial DNA, specific for the target bacterial
PT   species  -
XX
PS   Claim 14; Page 46; 168pp; English.
XX
CC   The invention relates to detecting target bacterial species suspected to
CC   be present in a sample, comprising contacting nucleic acids of target
CC   bacterial species with an amplification primer pair derived from a
CC   bacterial DNA fragment (ABA76825-ABA76861) specific for the target
CC   bacterial species but ubiquitous for different strains, amplifying the
CC   nucleic acid and detecting the presence or amount of an amplified
CC   sequence as an indication of the presence or amount of the target
CC   bacterial species. The invention includes primers and probes
CC   (ABA76862-ABA76984) against the target bacterial species, espeially
CC   E.coli, K.pneumoniae, P.aeruginosa, P.mirabilis, S.pneumoniae,
CC   S.aureus, S.epidermidis, E.faecalis, S.saprophyticus, S.pyogenes,
CC   H.influenzae, M.catarrhalis and/or group A Streptococci producing
CC   exotoxin A gene spe A, suspected to be present in a sample which is
CC   obtained from human patients, animals, environment or food, and which
CC   consists of one or more bacterial colonies. Oligonucleotide
CC   probes and primers complementary to the bacterial genes encoding
CC   resistance to antibiotics such as bla(tem), bla(rob), bla(shv), aadB,
CC   aacC1, aacC2, aacC3, aacA4, mecA, vanA, vanH, vanX, satA, aacA-aphD, vat,
CC   vga, msrA, sul and/or int (ABA76985-ABA77001) are also useful to identify
CC   commonly encountered and  clinically important resistance genes. The
CC   invention provides a rapid method of bacterial identification that can be
CC   achieved, which reduces the time currently required for the
CC   identification of pathogens in the clinical laboratory.
XX
SQ   Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 other;

  Query Match             0.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1003 TCTTGATGAACAGTG 1017
              ||||||||||||| |
Db         16 TCTTGATGAACAGCG 2


RESULT 110
AAD28764/c
ID   AAD28764 standard; DNA; 19 BP.
XX
AC   AAD28764;
XX
DT   07-MAY-2002  (first entry)
XX
DE   Oligonuccleotide primer #3 used in an assay to detect human AKAP10 DNA.
XX
KW   Human; polymorphic A-Kinase anchor protein; AKAP; disorder; neurological;
KW   bipolar; cardiovascular; cardiac; proliferative; neurodegenerative;
KW   cardiomyopathy; peripheral retinopathy; obesity; signal transduction;
KW   left ventricular function; Alzheimer's disease; retinitis pigmentosa;
KW   diabetes; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200204489-A2.
XX
PD   17-JAN-2002.
XX
PF   05-JUL-2001; 2001WO-US21308.
XX
PR   10-JUL-2000; 2000US-217251P.
PR   13-OCT-2000; 2000US-240335P.
PR   12-APR-2001; 2001US-0834700.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Braun A;
XX
DR   WPI; 2002-154919/20.
XX
PT   New polynucleotide encoding polymorphic A-Kinase anchor proteins for
PT   detecting an allelic variant of the human gene which is indicative of
PT   an alteration in signal transduction, and is related to a disorder e.g.
PT   Alzheimer's disease  -
XX
PS   Claim 75; Page 95; 290pp; English.
XX
```

CC The present invention relates to a polynucleotide encoding polymorphic A-
CC Kinase anchor protein (AKAP), with isoleucine residue at position 646
CC replaced with valine, leucine or phenylalanine. AKAP is useful for
CC detecting an allelic variant of a human AKAP10 gene which is indicative
CC of an alteration in signal transduction, where the alteration is related
CC to a disorder selected from cardiovascular, cardiac, proliferative,
CC neurological, neurodegenerative disorders, obesity, diabetes and
CC peripheral retinopathies, especially the disorders including Alzheimer's
CC disease, altered left ventricular function, cardiomyopathies, bipolar
CC disorder and retinitis pigmentosa. The method of the invention is useful
CC for indicating susceptibility to morbidity and/or increased or early
CC mortality of a subject, where the predominant allele comprises A at
CC position corresponding to 2073 of AKAP, or a polymorphic region of AKAP10
CC comprises a nucleotide other than A at position T corresponding to
CC position 2073 of AKAP, or other than T of the complement of AKAP, and the
CC detecting step is performed by allele specific hybridisation, primer
CC specific extension, oligonucleotide ligation assay, restriction enzyme
CC site analysis and single-stranded conformation polymorphism analysis, or
CC the detection is by detecting a signal group from radioisotopes, enzymes,
CC antigens, antibodies, spectrophotometric reagents, chemiluminescent
CC reagents, fluorescent reagents and other light producing reagents. The
CC present sequence is an oligonucleotide primer used in an assay for
CC detecting human AKAP10-6 and AKAP10-7 DNA.
XX
SQ Sequence 19 BP; 7 A; 6 C; 2 G; 4 T; 0 other;

Query Match 0.6%; Score 13.4; DB 1; Length 19;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 747 TTATTGATAATATGG 761
|| ||||||||||||
Db 19 TTGTTGATAATATGG 5

RESULT 111
AAZ39230/c
ID AAZ39230 standard; DNA; 18 BP.
XX
AC AAZ39230;
XX
DT 11-FEB-2000 (first entry)
XX
DE Probe for typing HLA allele B*3913.
XX
KW Human leukocyte antigen; HLA; allele; HLA-B*3913; HLA-B*1406; human;
KW HLA-B*51; HLA-DRB1*0820; HLA-DRB1*04; HLA-DRB4*01; allele typing; exon;
KW major histocompatibility complex; MHC; probe; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9954496-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-EP02614.
XX
PR 20-APR-1998; 98EP-0870088.
XX
PA (INNO-) INNOGENETICS NV.
XX
PI De Canck I, Mersch G, Rossau R;
XX
DR WPI; 1999-634008/54.
XX
PT New polynucleotides for human leukocyte antigen, HLA, allele fragments,
PT useful for typing HLA alleles -
XX
PS Claim 16; Page 18; 62pp; English.
XX
CC The invention provides polynucleotides corresponding to exon 2 and exon 3
CC of human leukocyte antigen (HLA) alleles HLA-B*3913, HLA-B*1406 and
CC HLA-B*51 and exon 2 of HLA alleles HLA-DRB1*0820, HLA-DRB1*04 and
CC HLA-DRB4*01. The polynucleotides are useful for typing the above HLA
CC alleles in a sample, especially by a method that comprises (a) amplifying
CC all/part of the relevant sequence using at least one primer pair; and (b)
CC hybridizing the amplified product to a set of probes specifically
CC hybridizing to target regions comprising one or more polymorphic
CC nucleotides of the sequence, to determine the absence or presence of the
CC allele in the sample. Diagnostic kits for (a) typing the alleles
CC comprising at least one preferred primer and/or at least one preferred
CC probe and (b) for detecting the protein fragment encoded by the
CC polynucleotides, comprising an antiserum or ligand (e.g. antibody)
CC binding specifically to the protein fragment are provided. The
CC polynucleotides also enable the isolation of the complete respective
CC genes from a human genomic library.
XX
SQ Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 other;

Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 1.6e+02;
Matches 15; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 785 AGACCACTAAGATGTAGC 802
|| |||| |||| |||
Db 18 AGCCCACTGAGATGAAGC 1

RESULT 112
AAZ22366/c
ID AAZ22366 standard; DNA; 18 BP.
XX
AC AAZ22366;
XX
DT 25-NOV-1999 (first entry)
XX
DE Phosphorothioate antisense oligonucleotide directed against FAN mRNA.
XX
KW Human; FAN; factor associated with N-SMase activation;
KW tumor necrosis factor; antisense oligonucleotide; disease;
KW inflammatory response; phosphorothioate; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5962671-A.
XX
PD 05-OCT-1999.
XX
PF 18-SEP-1998; 98US-0156425.
XX
PR 18-SEP-1998; 98US-0156425.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Cowsert LM;
XX
DR WPI; 1999-571295/48.
XX
PT Inhibition of the human FAN gene, useful for treating diseases
PT associated with an inflammatory response -
XX
PS Claim 3; Columns 27; 27pp; English.
XX
CC AAZ22345-84 represent phosphorothiate antisense oligonucleotide which
CC are directed against FAN (factor associated with N-SMase activation)
CC mRNA. FAN is a mediator of tumor necrosis factor (TNF)-induced
CC activation of N-SMase. The antisense oligonucleotides are 8-30
CC nucleotides in length. The antisense oligonucleotides are useful
CC for treating diseases associated with an inflammatory response.
XX
SQ Sequence 18 BP; 3 A; 5 C; 4 G; 6 T; 0 other;

Query Match 0.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 1.6e+02;

```
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        779 CTGGAGAGACCACTAAGA 796
              ||||||||||| ||| | |
Db         18 CTGGAGAGACTACTGACA 1


RESULT 113
AAA92684
ID   AAA92684 standard; DNA; 18 BP.
XX
AC   AAA92684;
XX
DT   08-JAN-2001  (first entry)
XX
DE   PCR primer for human V gene fragment from T cell clone MS5-D2.7.
XX
KW   T cell receptor; human; Vbeta13.1; vaccine; PCR primer;
KW   autoimmune disease; multiple sclerosis; rheumatoid arthritis;
KW   myasthenia gravis; systemic lupus erythematosus; autoimmune thyroiditis;
KW   Graves' disease; inflammatory bowel disease; autoimmune uveoretinitis;
KW   polymyositis; diabetes; myelin basic protein; MBP; ss.
XX
OS   Homo sapiens.
XX
PN   WO200050641-A1.
XX
PD   31-AUG-2000.
XX
PF   22-FEB-2000; 2000WO-US40006.
XX
PR   23-FEB-1999;   99US-0121311.
XX
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI   Zhang JZ;
XX
DR   WPI; 2000-572105/53.
XX
PT   Novel oligonucleotide used as primer along with nucleic acid from
PT   V-beta to J-beta of V-beta13.1 gene in V-beta13.1 T cells to amplify a
PT   portion of the V-beta 13.1 gene or for detecting a peptide motif in T
PT   cells  -
XX
PS   Example 2; Page 23; 59pp; English.
XX
CC   T cell receptors comprise alpha and beta chains, with the beta chains
CC   comprising of Vbeta, Dbeta, Jbeta and Cbeta regions. The present
CC   invention relates to the "LGRAGLTY" motif (see AAB21989). The LGRAGLTY
CC   peptide is a common motif found in the T cell receptors of a subset of
CC   human Vbeta13.1 T cells. The LGRAGLTY peptide may be used to vaccinate
CC   patients for prevention of autoimmune diseases e.g. multiple sclerosis,
CC   rheumatoid arthritis, myasthenia gravis, systemic lupus erythematosus,
CC   autoimmune thyroiditis, Graves' disease, inflammatory bowel disease,
CC   autoimmune uveoretinitis, polymyositis, and certain types of diabetes.
CC   Various human V gene fragments from T cell clone were isolated (see
CC   AAA91796 to AAA92677), which encoded peptides specific for the 83-99
CC   peptide of myelin basic protein (MBP), which in turn is implicated in
CC   multiple sclerosis. Th coding regions of AAA91796 to AAA92677 were
CC   isolated to examine the Vgene rearrangments between individual MBP83-99
CC   T cell clones. The present sequence is a PCR primer used to isolate the
CC   sequences of AAA91796 to AAA92677.
XX
SQ   Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        656 AGCTTTGGACAGAGGGTT 673
              ||||| |||||| ||| |
Db          1 AGCTTAGGACAGGGGGCT 18


RESULT 114
AAZ39594
ID   AAZ39594 standard; DNA; 18 BP.
XX
AC   AAZ39594;
XX
DT   28-FEB-2000  (first entry)
XX
DE   Human cREL mRNA inhibiting antisense oligo ISIS #24078.
XX
KW   Human; cREL; transcriptional activator; antisense compound;
KW   therapeutic; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US6001652-A.
XX
PD   14-DEC-1999.
XX
PF   18-SEP-1998;   98US-0156253.
XX
PR   18-SEP-1998;   98US-0156253.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM,  Baker BF;
XX
DR   WPI; 2000-061889/05.
XX
PT   Antisense modulation of human cREL expression -
XX
PS   Claim 1; Column 27; 26pp; English.
XX
CC   The invention provides antisense compounds targeted to a coding region,
CC   3'UTR or 5'UTR of a nucleic acid molecule encoding human cREL
CC   (transcriptional activator). The antisense compounds are useful as
CC   research agents and diagnostics such as in the elucidation of the
CC   function of a particular gene. The antisense compounds can be useful as
CC   therapeutic modalities that can be configured to be useful in treatment
CC   regimes for treatment of cells, tissues and animals, especially humans.
CC   In the prior art, there are no known therapeutic agents which
CC   effectively inhibit the synthesis of cREL and additional agents capable
CC   of inhibiting cREL function are still required. Sequences AAZ39588-627
CC   represent antisense phosphorothioate oligodeoxynucleotides inhibiting
CC   human cREL mRNA.
XX
SQ   Sequence 18 BP; 0 A; 3 C; 7 G; 8 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        805 CTGTTGTTGTCCCTGCTG 822
              | |||||||||  |||||
Db          1 CGGTTGTTGTCTGTGCTG 18


RESULT 115
AAD15569
ID   AAD15569 standard; DNA; 18 BP.
XX
AC   AAD15569;
XX
DT   15-NOV-2001  (first entry)
XX
DE   Brome mosaic virus (BMV) 35kDa protein target DNA #7.
XX
KW   Brome mosaic virus; BMV; 35kDa protein; genetic disease; therapeutic;
KW   antisense target; ss.
XX
OS   Brome mosaic virus.
```

```
XX
PN   WO200161030-A2.
XX
PD   23-AUG-2001.
XX
PF   14-FEB-2001; 2001WO-US04732.
XX
PR   14-FEB-2000; 2000US-0504653.
XX
PA   (BOLL/) BOLLON A P.
PA   (GRAY/) GRAY D M.
PA   (JUSE/) JU-SEOG L.
XX
PI   Bollon AP,  Gray DM,  Ju-Seog L;
XX
DR   WPI; 2001-529916/58.
XX
PT   Selecting optimal subsequence antisense targets for inhibition of mRNA
PT   expression of target mRNA for the therapeutic treatment of genetic
PT   disease -
XX
PS   Example 3; Page 22; 87pp; English.
XX
CC   The invention relates to a method for selecting optimal subsequence
CC   antisense targets. The method involves preparing an antisense
CC   oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC   sequences, as well as antisense oligonucleotides capable of binding DNA.
CC   The antisense and antigene libraries are useful for preparing therapeutic
CC   agents for the treatment of genetic disease. The present DNA sequence is
CC   Brome mosaic virus (BMV) 35kDa protein target DNA related to the
CC   invention.
CC   Note: The present sequence is shown as DNA in the specification; however,
CC   in vivo, this target sequence would be mRNA.
XX
SQ   Sequence 18 BP; 5 A; 4 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        889 CCCATGTCTACCAAAGTT 906
              || ||||||| || ||||
Db          1 CCGATGTCTAACATAGTT 18


RESULT 116
AAD15570/c
ID   AAD15570 standard; DNA; 18 BP.
XX
AC   AAD15570;
XX
DT   15-NOV-2001  (first entry)
XX
DE   BMV 35kDa protein gene targetted antisense oligonucleotide #7.
XX
KW   Brome mosaic virus; BMV; 35kDa protein; genetic disease; therapeutic;
KW   antisense; phosphorothioate backbone; ss.
XX
OS   Brome mosaic virus.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
XX
PN   WO200161030-A2.
XX
PD   23-AUG-2001.
XX
PF   14-FEB-2001; 2001WO-US04732.
XX
PR   14-FEB-2000; 2000US-0504653.
XX
PA   (BOLL/) BOLLON A P.
PA   (GRAY/) GRAY D M.
PA   (JUSE/) JU-SEOG L.
XX
PI   Bollon AP,  Gray DM,  Ju-Seog L;
XX
DR   WPI; 2001-529916/58.
XX
PT   Selecting optimal subsequence antisense targets for inhibition of mRNA
PT   expression of target mRNA for the therapeutic treatment of genetic
PT   disease -
XX
PS   Example 3; Page 22; 87pp; English.
XX
CC   The invention relates to a method for selecting optimal subsequence
CC   antisense targets. The method involves preparing an antisense
CC   oligonucleotide capable of inhibiting mRNA expression of target mRNA
CC   sequences, as well as antisense oligonucleotides capable of binding DNA.
CC   The antisense and antigene libraries are useful for preparing therapeutic
CC   agents for the treatment of genetic disease. The present DNA sequence is
CC   phosphorothioate antisense oligonucleotide which is targetted to Brome
CC   mosaic virus (BMV) 35kDa protein gene.
XX
SQ   Sequence 18 BP; 6 A; 3 C; 4 G; 5 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        889 CCCATGTCTACCAAAGTT 906
              || ||||||| || ||||
Db         18 CCGATGTCTAACATAGTT 1


RESULT 117
AAF61531
ID   AAF61531 standard; DNA; 18 BP.
XX
AC   AAF61531;
XX
DT   29-JUN-2001  (first entry)
XX
DE   Electrophoretic device associated fluorescently labelled primer 2.
XX
KW   Primer; gel electrophoresis; detection; nucleic acid sequencing; dye;
KW   fluorescent emission; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= "OTHER"
FT                   /note= "5'-end labelled with TR"
XX
PN   DE19948391-A1.
XX
PD   12-APR-2001.
XX
PF   07-OCT-1999;   99DE-1048391.
XX
PR   07-OCT-1999;   99DE-1048391.
XX
PA   (EMBL-) EMBL EURO LAB MOLEKULARBIOLOGIE.
XX
PI   Ansorge W,  Stegemann J,  Ventzki R,  Schwager C;
XX
DR   WPI; 2001-246202/26.
XX
PT   New electrophoretic device, useful for simultaneous analysis of
PT   fluorescently labeled molecules such as for nucleic acid sequencing,
PT   comprises specific combination of dyes, lasers and detector systems  -
```

```
XX
PS   Example 1; Page 24; 52pp; German.
XX
CC   This invention describes a novel electrophoretic device (I) for analysis
CC   of fluorescently labeled molecules (II), particularly biological
CC   molecules which comprises (i) a set of parallel gel electrophoresis
CC   tracks (III), extending along a molecular distribution direction (M);
CC   (ii) energy source (IV) for applying electrical potential to both ends
CC   of (III); (iii) a set of lasers that can excite several different
CC   fluorescent labels (F) on (II), with at least some (F) having different
CC   absorption and/or emission wavelengths from the others, and producing
CC   beams transverse to M and essentially parallel to each other so as to
CC   divide (III) into detection regions for individual F (and attached (II));
CC   and (iv) (iv) detectors (V) for track- and marker-resolved detection of
CC   beams emitted from F. (V) consists of a set of detector fields (VI) in M
CC   and preferably parallel to the laser beams, and aligned to a particular
CC   beam so that each can provide a positionally resolved detection of
CC   emitted radiation, via a spectral filter and beam conduction arrangement
CC   (A). The spectral selectivity of the filters, the absorption/emission
CC   characteristics of F and the wavelengths of the lasers are chosen such
CC   that the use of four lasers and at least four (VI) allows resolved
CC   detection of at least four different F, independently of each other. The
CC   device is particularly used to analyze nucleic acids from sequencing
CC   reactions. Proper selection of selectivity of spectral filters,
CC   fluorescent markers and laser wavelengths allows differential detection
CC   and evaluation of fluorescent emissions from several dyes, i.e.
CC   combination of at least four dyes used in a sequencing reaction. This
CC   allows a reduction in cost, reagent consumption and labor in
CC   large-scale sequencing projects. The system may also include an
CC   arrangement for localized temperature variation, e.g. to increase band
CC   separation and thus facilitate detection. This sequence represents
CC   a primer used to illustrate the method of the invention.
XX
SQ   Sequence 18 BP; 10 A; 1 C; 5 G; 2 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        911 ATTCAAAATGAGAAAAGA 928
              ||  ||| ||||||||||
Db          1 ATGGAAACTGAGAAAAGA 18


RESULT 118
AAF61545
ID   AAF61545 standard; DNA; 18 BP.
XX
AC   AAF61545;
XX
DT   29-JUN-2001  (first entry)
XX
DE   Electrophoretic device-associated fluorescently labelled primer 2.
XX
KW   Nucleic acid sequencing; fluorescent dye; electrophoresis; primer; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1
FT                    /*tag=  a
FT                    /mod_base= "OTHER"
FT                    /note= "5'-end labelled with TR"
XX
PN   DE19948260-A1.
XX
PD   12-APR-2001.
XX
PF   07-OCT-1999;   99DE-1048260.
XX
PR   07-OCT-1999;   99DE-1048260.
XX
PA   (EMBL-) EMBL EURO LAB MOLEKULARBIOLOGIE.
XX
PI   Ansorge W,  Benes V,  Faulstich K,  Stegemann J,  Ventzki R;
PI   Wurmbach E;
XX
DR   WPI; 2001-246201/26.
XX
PT   New analysis of nucleic acid, useful for sequencing, comprises
PT   separating four differently labeled products in a single track and
PT   independent detection  -
XX
PS   Example 1; Page 6; 10pp; German.
XX
CC   This invention describes a novel method for the analysis of nucleic acids
CC   (NA) in which four products (A), labelled with different fluorescent dyes
CC   (F) and from a sequencing reaction, are separated in a single track
CC   according to size and analyzed independently of each other. The method is
CC   used to analyze products of nucleic acid sequencing reactions.
CC   Simultaneous evaluation of four or more sequencing reactions can be done
CC   using different F in a single electrophoretic track, and many tracks can
CC   be analyzed in a single run, with 0.2 million bases or more, determined
CC   on a single gel plate with 384 tracks. This reduces costs, reagent
CC   consumption and labor involved in large-scale sequencing projects. This
CC   sequence represents a fluorescently labelled primer used to illustrate
CC   the method of the invention.
XX
SQ   Sequence 18 BP; 10 A; 1 C; 5 G; 2 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        911 ATTCAAAATGAGAAAAGA 928
              ||  ||| ||||||||||
Db          1 ATGGAAACTGAGAAAAGA 18


RESULT 119
AAD38648
ID   AAD38648 standard; DNA; 18 BP.
XX
AC   AAD38648;
XX
DT   10-SEP-2002  (first entry)
XX
DE   Human Vbeta-Dbeta-Jbeta region specific RT-PCR primer, MS5-D2.7.
XX
KW   Human; autoimmune disease; multiple sclerosis; MS; Jbeta; Cbeta; Vbeta;
KW   Dbeta; immunosuppressive; T-cell receptor; reverse transcription;
KW   RT; therapy; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200216434-A1.
XX
PD   28-FEB-2002.
XX
PF   22-AUG-2000; 2000WO-US22988.
XX
PR   22-AUG-2000; 2000WO-US22988.
XX
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI   Zhang JZ;
XX
DR   WPI; 2002-452164/48.
XX
PT   A novel peptide used in the treatment of autoimmune disease e.g.
PT   multiple sclerosis -
XX
PS   Example 2; Page 25; 64pp; English.
XX
CC   The invention relates to a peptide used in the treatment of autoimmune
CC   disease e.g. multiple sclerosis (MS). More particularly, it concerns a
```

```
CC   T-cell receptor sequence found in some MS patients and methods for its
CC   detection. T cell receptors comprise alpha and beta chains, with beta
CC   chains comprising the following regions from N-terminus to C-terminus:
CC   Vbeta-Dbeta-Jbeta-Cbeta. T cell receptors naturally vary in the Vbeta-
CC   Dbeta-Jbeta region. The peptides of the invention are used for treating
CC   autoimmune disease e.g multiple sclerosis. The present sequence is a
CC   reverse transcription (RT)-PCR primer specific for human Vbeta-Dbeta-
CC   Jbeta junctional regions of independent MBP83-99 T cell clones. This
CC   sequence is used in the exemplification of the invention.
XX
SQ   Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        656 AGCTTTGGACAGAGGGTT 673
              ||||| |||||| ||| |
Db          1 AGCTTAGGACAGGGGGCT 18


RESULT 120
ABL31595/c
ID   ABL31595 standard; DNA; 18 BP.
XX
AC   ABL31595;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 1084.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP04662.
XX
PR   01-JUN-2000; 2000JP-0164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes
PT   of individuals e.g. by determining immunogenetic differences when
PT   transplanting between them -
XX
PS   Claim 10; Page 298; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class I antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals.
XX
SQ   Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 other;

  Query Match             0.6%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        785 AGACCACTAAGATGTAGC 802
              || ||||| ||||| |||
Db         18 AGCCCACTGAGATGAAGC 1


RESULT 121
ABF71712
ID   ABF71712 standard; DNA; 13 BP.
XX
AC   ABF71712;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 171709 for detecting SNP TSC0042802.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status -
XX
PS   Claim 1; SEQ ID 171709; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 other;

  Query Match             0.6%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 98;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        742 GAGGATTATTGAT 754
              |||||||||||||
Db          1 GAGGATTATTGAT 13


RESULT 122
ABF71713/c
ID   ABF71713 standard; DNA; 13 BP.
XX
AC   ABF71713;
```

```
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 171710 for detecting SNP TSC0042802.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 171710; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 4 C; 0 G; 4 T; 0 other;

  Query Match             0.6%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 98;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        742 GAGGATTATTGAT 754
              |||||||||||||
Db         13 GAGGATTATTGAT 1


RESULT 123
ABH29586
ID   ABH29586 standard; DNA; 13 BP.
XX
AC   ABH29586;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 229563 for detecting SNP TSC0055984.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 229563; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 other;

  Query Match             0.6%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 98;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        988 TTTTGAGATTAAA 1000
              |||||||||||||
Db          1 TTTTGAGATTAAA 13


RESULT 124
ABH29587/c
ID   ABH29587 standard; DNA; 13 BP.
XX
AC   ABH29587;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 229564 for detecting SNP TSC0055984.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
```

PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 229564; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 other;

Query Match 0.6%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 988 TTTTGAGATTAAA 1000
||||||||||||||
Db 13 TTTTGAGATTAAA 1

RESULT 125
ABH49442/c
ID ABH49442 standard; DNA; 13 BP.
XX
AC ABH49442;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 249419 for detecting SNP TSC0060923.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 249419; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 other;

Query Match 0.6%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 906 TTACAATTCAAAA 918
||||||||||||||
Db 13 TTACAATTCAAAA 1

RESULT 126
ABH49443
ID ABH49443 standard; DNA; 13 BP.
XX
AC ABH49443;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 249420 for detecting SNP TSC0060923.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 249420; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 other;

Query Match 0.6%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 98;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 906 TTACAATTCAAAA 918
||||||||||||||

```
Db          1 TTACAATTCAAAA 13


RESULT 127
ABL31167/c
ID   ABL31167 standard; DNA; 16 BP.
XX
AC   ABL31167;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 656.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP04662.
XX
PR   01-JUN-2000; 2000JP-0164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
PI   Inoko H,  Kagiya T,  Ichihara T,  Matsumura Y,  Moriya S,  Nishida M;
XX
DR   WPI; 2002-122074/16.
XX
PT   Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes
PT   of individuals e.g. by determining immunogenetic differences when
PT   transplanting between them -
XX
PS   Claim 10; Page 217; 345pp; Japanese.
XX
CC   The invention relates to a typing kit for judging human leukocyte antigen
CC   (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC   oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC   genes e.g. belonging to HLA class 1 antigens on human genome and
CC   containing gene polymorphisms as alloantigens have been immobilised as
CC   primers for amplification of cleaved nucleic acids relating to gene
CC   polymorphisms. The method is useful for judging HLA genotypes of
CC   individuals by determining immunogenetic differences before transplanting
CC   between them, providing genetic information to decide compatibility of
CC   organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC   pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC   diagnosis of genetic diseases and identifying individuals.
XX
SQ   Sequence 16 BP; 6 A; 3 C; 5 G; 2 T; 0 other;

  Query Match             0.6%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        844 AGCTCCTCCTGGT 856
              |||||||||||||
Db         16 AGCTCCTCCTGGT 4


RESULT 128
AAQ13905
ID   AAQ13905 standard; DNA; 16 BP.
XX
AC   AAQ13905;
XX
DT   25-MAR-2003  (updated)
DT   05-NOV-1991  (first entry)
XX
DE   Probe YZ24 to N-ras codon 12.
XX
KW   ras; point mutation; oncogenesis; PCR; tumour; ss.
XX
OS   Synthetic.
XX
PN   WO9112343-A.
XX
PD   22-AUG-1991.
XX
PF   07-FEB-1991;   91WO-US00858.
XX
PR   07-FEB-1990;   90US-0477260.
XX
PA   (CETU ) CETUS CORP.
XX
PI   Mccormick FP,  Lyons JF;
XX
DR   WPI; 1991-267154/36.
XX
PT   Method for detection of point mutation(s) in nucleic acid
PT   segments - where segments encode GTP binding protein or sub-unit
PT   and method involves amplification followed by sequence-specific
PT   probe hybridisation
XX
PS   Example; Page 57; 69pp; English.
XX
CC   This probe corresponds to the sequence around codon 12 of the ras
CC   p21 gene. It is one of 63 probes which are of use in detecting
CC   point mutations in nucleic acid sequences encoding ras proteins,
CC   specifically at positions 12, 13 and 61, three potentially oncogenic
CC   sites. See AAQ13900-Q13962.
CC   (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 16 BP; 2 A; 2 C; 8 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         72 GAGCCGCGGGTGTTGG 87
              |||| || ||||||||
Db          1 GAGCAGCTGGTGTTGG 16


RESULT 129
AAV49185/c
ID   AAV49185 standard; DNA; 16 BP.
XX
AC   AAV49185;
XX
DT   15-OCT-1998  (first entry)
XX
DE   rb gene antisense oligonucleotide rb-N-133.
XX
KW   rb gene; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP856579-A1.
XX
PD   05-AUG-1998.
XX
PF   31-JAN-1997;   97EP-0101531.
XX
PR   31-JAN-1997;   97EP-0101531.
XX
PA   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI   Brysch W,  Schlingensiepen K;
XX
DR   WPI; 1998-400910/35.
XX
```

PT Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of
PT residues able to form two or three hydrogen bonds, have greater
PT activity and reduced toxicity, used therapeutically or to modulate
PT growth of cells in culture
XX
PS Example 7; Fig 9c; 286pp; English.
XX
CC AAV49008-236 represent antisense oligonucleotides directed against
CC the rb gene. Of these, only oligonucleotides AAV49008-52 resulted in
CC effective downregulation of negative growth control by rb, while
CC oligonucleotides AAV49052-236 had little effect. The oligonucleotides
CC exemplify the invention. The specification describes oligonucleotides
CC that contain 8-30 nucleotides, which contain at most 8 nucleotides
CC that can each form three hydrogen bonds to cytosine; do not contain
CC four consecutive nucleotides able to form three H-bonds each to four
CC consecutive cytosines; do not contain two sequences of three consecutive
CC nucleotides each able to form three H-bonds to three consecutive
CC cytosines, and the ratio between residues able to form two H-bonds
CC each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC oligonucleotides are used to modulate expression of genes, particularly
CC the genes for p53, ErB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC oligonucleotides can also be used to analyse function of proteins (by
CC altering their expression or activity) and therapeutically, e.g. in
CC cases of cancer or (targeting TGF) for stimulating the immune system.
XX
SQ Sequence 16 BP; 6 A; 0 C; 2 G; 8 T; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 16;
Best Local Similarity 87.5%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1984 TTAAATACAATATCAT 1999
              |||||| ||| |||||
Db         16 TTAAATTCAAAATCAT 1
```

RESULT 130
AAX63890
ID AAX63890 standard; RNA; 17 BP.
XX
AC AAX63890;
XX
DT 20-JUL-1999 (first entry)
XX
DE Rabbit stromelysin hammerhead target SEQ ID NO:522.
XX
KW Arthritic condition; graft tolerance; immune response; target; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW diagnosis; ss.
XX
OS Oryctolagus cuniculus.
XX
PN WO9618736-A2.
XX
PD 20-JUN-1996.
XX
PF 22-NOV-1995; 95WO-US15516.
XX
PR 05-OCT-1995; 95US-0541365.
PR 13-DEC-1994; 94US-0354920.
PR 23-DEC-1994; 94US-0363253.
PR 23-DEC-1994; 94US-0363254.
PR 17-FEB-1995; 95US-0390850.
PR 20-APR-1995; 95US-0426124.
PR 02-MAY-1995; 95US-0432874.
PR 04-MAY-1995; 95US-0434509.
PR 07-JUL-1995; 95US-0000951.
PR 07-JUL-1995; 95US-0000974.
PR 07-AUG-1995; 95US-0512861.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Draper K, Gustofson J, McSwiggen J, Pavco P, Stinchcomb DT;
PI Beigelman L, Karpeisky A, Modak A, Usman N, Burgin A;
PI Matulic-Adamic J, Jarvis T, Thompson JD, Wincott F;
XX
DR WPI; 1996-300653/30.
XX
PT Enzymatic nucleic acid molecules having a hammer-head motif - used
PT for the treatment of arthritis, induction of graft tolerance or
PT treatment of auto-immune diseases
XX
PS Example 1; Page 154; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose
CC residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii)
CC at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification.
CC The ENA's can inhibit collagenase and stromelysin production in the
CC synovial membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 5 G; 5 U; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 62.5%; Pred. No. 1.8e+02;
Matches 10; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

```
Qy        771 TCATAACTCTGGAGAG 786
              : |:|||:|:|||| |
Db          1 UGAUAACUCUGGAGUG 16
```

RESULT 131
AAA18678
ID AAA18678 standard; RNA; 17 BP.
XX
AC AAA18678;
XX
DT 19-JUN-2000 (first entry)
XX
DE Human TIE-2 substrate sequence SEQ ID NO:1904.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US06507.

```
XX
PR   27-MAR-1998;   98US-0079678.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  McSwiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or
PT   stability of an mRNA encoding an angiogenic factors  -
XX
PS   Claim 56; Page 110; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with
CC   RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ   Sequence 17 BP; 5 A; 6 C; 1 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   68.8%;  Pred. No. 1.8e+02;
  Matches   11;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1027 CAAAATTTCCAAGCAC 1042
              ||| |:::|||||| |
Db          2 CAAUAUUUCCAAGCUC 17


RESULT 132
AAA18679
ID   AAA18679 standard; RNA; 17 BP.
XX
AC   AAA18679;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Human TIE-2 substrate sequence SEQ ID NO:1905.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US06507.
XX
PR   27-MAR-1998;   98US-0079678.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  McSwiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or
PT   stability of an mRNA encoding an angiogenic factors  -
XX
PS   Claim 56; Page 110; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with
CC   RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ   Sequence 17 BP; 5 A; 5 C; 2 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   68.8%;  Pred. No. 1.8e+02;
  Matches   11;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1027 CAAAATTTCCAAGCAC 1042
              ||| |:::|||||| |
Db          1 CAAUAUUUCCAAGCUC 16


RESULT 133
AAF01818
ID   AAF01818 standard; DNA; 17 BP.
XX
AC   AAF01818;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #113.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
```

PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US09721.
XX
PR 12-APR-1999; 99US-0129390.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, McSwiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor
PT protein, interferon alpha and erythropoietin -
XX
PS Claim 37; Page 58; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC transcription factor gene, IRF-2 and/or the CAATT Displacement
CC Protein (CDP). Inhibition of the repressors removes prevents
CC inhibition (and consequently increases expression of) genes involved in
CC the production of erythropoietin, granulocyte colony stimulating factor
CC protein and interferon alpha.
XX
SQ Sequence 17 BP; 4 A; 3 C; 5 G; 5 T; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 870 ATGTTATTCAGACTTG 885
||| |||||||||| |
Db 2 ATGGTATTCAGACTCG 17

RESULT 134
AAF01819
ID AAF01819 standard; DNA; 17 BP.
XX
AC AAF01819;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #114.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US09721.
XX
PR 12-APR-1999; 99US-0129390.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, McSwiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor
PT protein, interferon alpha and erythropoietin -
XX
PS Claim 37; Page 58; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC transcription factor gene, IRF-2 and/or the CAATT Displacement
CC Protein (CDP). Inhibition of the repressors removes prevents
CC inhibition (and consequently increases expression of) genes involved in
CC the production of erythropoietin, granulocyte colony stimulating factor
CC protein and interferon alpha.
XX
SQ Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 870 ATGTTATTCAGACTTG 885
||| |||||||||| |
Db 1 ATGGTATTCAGACTCG 16

RESULT 135
AAF01833
ID AAF01833 standard; DNA; 17 BP.
XX
AC AAF01833;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #128.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US09721.
XX
PR 12-APR-1999; 99US-0129390.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, McSwiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor
PT protein, interferon alpha and erythropoietin -
XX
PS Claim 37; Page 58; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC transcription factor gene, IRF-2 and/or the CAATT Displacement
CC Protein (CDP). Inhibition of the repressors removes prevents
CC inhibition (and consequently increases expression of) genes involved in
CC the production of erythropoietin, granulocyte colony stimulating factor
CC protein and interferon alpha.
XX
SQ Sequence 17 BP; 4 A; 7 C; 3 G; 3 T; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 889 CCCATGTCTACCAAAG 904
||||| |||||||| |
Db 2 CCCATCTCTACCAAGG 17

```
RESULT 136
ABA81360
ID   ABA81360 standard; DNA; 17 BP.
XX
AC   ABA81360;
XX
DT   24-JAN-2002  (first entry)
XX
DE   PSEN1 mutation correcting oligonucleotide SEQ ID NO: 4206.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US09761.
XX
PR   27-MAR-2000; 2000US-192176P.
PR   27-MAR-2000; 2000US-192179P.
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification -
XX
PS   Claim 7; Page 270; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1031 ATTTCCAAGCACTGGA 1046
             ||||||| |||||||
Db          2 ATTTCCATTCACTGGA 17


RESULT 137
ABA81361/c
ID   ABA81361 standard; DNA; 17 BP.
XX
AC   ABA81361;
XX
DT   24-JAN-2002  (first entry)
XX
DE   PSEN1 mutation correcting oligonucleotide SEQ ID NO: 4207.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US09761.
XX
PR   27-MAR-2000; 2000US-192176P.
PR   27-MAR-2000; 2000US-192179P.
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification -
XX
PS   Claim 7; Page 270; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention.
XX
SQ   Sequence 17 BP; 6 A; 3 C; 4 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1031 ATTTCCAAGCACTGGA 1046
```

```
                  ||||||| |||||||
Db          16 ATTTCCATTCACTGGA 1


RESULT 138
ABK02559
ID   ABK02559 standard; RNA; 17 BP.
XX
AC   ABK02559;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Amberzyme #231.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 88; Page 135; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is an amberzyme molecule of the invention.
XX
SQ   Sequence 17 BP; 7 A; 2 C; 3 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   56.2%;  Pred. No. 1.8e+02;
  Matches    9;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        873 TTATTCAGACTTGGCA 888
              ::|::|||| :|||
Db          2 UUAUUCAGAAAUGGCA 17


RESULT 139
ABK03520
ID   ABK03520 standard; RNA; 17 BP.
XX
AC   ABK03520;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Zinzyme #71.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
```

```
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 30; Page 155; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is a zinzyme molecule of the invention.
XX
SQ   Sequence 17 BP; 2 A; 2 C; 5 G; 8 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+02;
  Matches    8;  Conservative    6;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        797 TGTAGCAGCTGTTGTT 812
              :|:||||||:  :|::
Db          2 UGUAGCAGCUUGUGUU 17


RESULT 140
ABK03521
ID   ABK03521 standard; RNA; 17 BP.
XX
AC   ABK03521;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human CD20 Zinzyme #72.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 30; Page 155; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is a zinzyme molecule of the invention.
XX
SQ   Sequence 17 BP; 3 A; 3 C; 5 G; 6 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   56.2%;  Pred. No. 1.8e+02;
  Matches    9;  Conservative    5;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        800 AGCAGCTGTTGTTGTC 815
              ||||||:  :|::|:|
Db          1 AGCAGCUUGUGUUGUC 16
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RESULT 141
ABN07620
ID   ABN07620 standard; DNA; 17 BP.
XX
AC   ABN07620;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7612.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 7612; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        730 ACCTTTTACCTTGAGG 745
              |||| | |||||||||
Db          2 ACCTGTGACCTTGAGG 17


RESULT 142
ABN07623
ID   ABN07623 standard; DNA; 17 BP.
XX
AC   ABN07623;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7615.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 7615; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
```

CC hGDMLP-1 proteins, as standards in assays used to determine the
CC concentration and/or amount specifically of hGDMLP proteins, as specific
CC biomolecule capture probes for surface-enhanced laser desorption
CC ionisation, as therapeutic supplement in patients having specific
CC deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC diagnosing a disorder associated with the expression of hGDMLP-1, in
CC particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC chromosome 22. The present sequence represents an oligomer used in the
CC screening of the hGDMLP-1 sequence in the exemplification of the present
CC invention.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ Sequence 17 BP; 4 A; 3 C; 5 G; 5 T; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 732 CTTTTACCTTGAGGAT 747
|| | ||||||||||
Db 1 CTGTGACCTTGAGGAT 16

RESULT 143
ABN10063/c
ID ABN10063 standard; DNA; 17 BP.
XX
AC ABN10063;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10055.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US16981.
XX
PR 26-MAY-2000; 2000US-207456P.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
PR 30-JAN-2001; 2001WO-US00661.
PR 30-JAN-2001; 2001WO-US00662.
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 05-FEB-2001; 2001US-266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1
PT proteins, or as specific biomolecule capture probes for
PT surface-enhanced laser desorption ionization, comprises human
PT myosin-like protein hGDMLP-1 -
XX
PS Disclosure; SEQ ID 10055; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC hGDMLP-1 can be used in gene therapy and vaccine production. The
CC hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC substrates, to provide initial substrates for the recombinant engineering
CC of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC be used as immunogens to raise antibodies that specifically recognise
CC hGDMLP-1 proteins, as standards in assays used to determine the
CC concentration and/or amount specifically of hGDMLP proteins, as specific
CC biomolecule capture probes for surface-enhanced laser desorption
CC ionisation, as therapeutic supplement in patients having specific
CC deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC diagnosing a disorder associated with the expression of hGDMLP-1, in
CC particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC chromosome 22. The present sequence represents an oligomer used in the
CC screening of the hGDMLP-1 sequence in the exemplification of the present
CC invention.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 other;

Query Match 0.6%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1032 TTTCCAAGCACTGGAC 1047
|||||||| ||||||
Db 17 TTTCCAAGGTCTGGAC 2

RESULT 144
ABN10064/c
ID ABN10064 standard; DNA; 17 BP.
XX
AC ABN10064;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10056.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US16981.
XX
PR 26-MAY-2000; 2000US-207456P.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
PR 30-JAN-2001; 2001WO-US00661.
PR 30-JAN-2001; 2001WO-US00662.
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.

```
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 10056; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1032 TTTCCAAGCACTGGAC 1047
              ||||||||  ||||||
Db         16 TTTCCAAGGTCTGGAC 1


RESULT 145
ABN10297
ID   ABN10297 standard; DNA; 17 BP.
XX
AC   ABN10297;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10289.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 10289; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 7 A; 3 C; 4 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        675 ACTTTGCAGCGGAAGA 690
              |||||| | |||||||
Db          2 ACTTTGAAACGGAAGA 17


RESULT 146
ABN10298
ID   ABN10298 standard; DNA; 17 BP.
XX
AC   ABN10298;
XX
DT   29-MAY-2002  (first entry)
XX
```

```
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10290.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 10290; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        675 ACTTTGCAGCGGAAGA 690
              |||||| | |||||||
Db          1 ACTTTGAAACGGAAGA 16


RESULT 147
ABK17658
ID   ABK17658 standard; RNA; 17 BP.
XX
AC   ABK17658;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG hammerhead ribozyme target sequence, Seq ID No 305.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US15866.
XX
PR   16-MAY-2000; 2000US-0572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T, Von Carlowitz I, McSwiggen JA, Mclaughlin F, Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related
PT   gene, useful for treating cancer, diabetic retinopathy, macular
PT   degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber
PT   syndrome -
XX
PS   Claim 4; Page 64; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
```

```
CC   related PCR primers of the invention.
XX
SQ   Sequence 17 BP; 5 A; 7 C; 1 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   62.5%;  Pred. No. 1.8e+02;
  Matches   10;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        899 CCAAAGTTTACAATTC 914
              ||||||::: ||| :|
Db          2 CCAAAGUUUCCAACUC 17


RESULT 148
ABK17659
ID   ABK17659 standard; RNA; 17 BP.
XX
AC   ABK17659;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG hammerhead ribozyme target sequence, Seq ID No 306.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US15866.
XX
PR   16-MAY-2000; 2000US-0572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  McSwiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related
PT   gene, useful for treating cancer, diabetic retinopathy, macular
PT   degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber
PT   syndrome  -
XX
PS   Claim 4; Page 64; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention.
XX
SQ   Sequence 17 BP; 5 A; 7 C; 1 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   62.5%;  Pred. No. 1.8e+02;
  Matches   10;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        899 CCAAAGTTTACAATTC 914
              ||||||::: ||| :|
Db          1 CCAAAGUUUCCAACUC 16


RESULT 149
ABT39783/c
ID   ABT39783 standard; DNA; 17 BP.
XX
AC   ABT39783;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 5420.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001PR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 667; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
```

```
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 6 A; 4 C; 4 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        967 CAGCTGTTGTGGAGAT 982
              ||||| |||| |||||
Db         17 CAGCTCTTGTTGAGAT 2


RESULT 150
ABZ60910/c
ID   ABZ60910 standard; RNA; 17 BP.
XX
AC   ABZ60910;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human K-Ras DNAzyme substrate #1022.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US16840.
XX
PR   29-MAY-2001; 2001US-294140P.
PR   06-JUN-2001; 2001US-296249P.
PR   10-SEP-2001; 2001US-318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences  -
XX
PS   Claim 58; Page 104; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and
CC   anti-rheumatic activity. The nucleic acid molecules are useful for
CC   reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 6 A; 1 C; 3 G; 7 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        763 TCAAGAAGTCATAACT 778
              ||||||| |||| |||
Db         17 TCAAGAAATCATTACT 2


RESULT 151
ABZ64995
ID   ABZ64995 standard; RNA; 17 BP.
XX
AC   ABZ64995;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #452.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US16840.
XX
PR   29-MAY-2001; 2001US-294140P.
PR   06-JUN-2001; 2001US-296249P.
PR   10-SEP-2001; 2001US-318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences  -
XX
PS   Claim 4; Page 141; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and
CC   anti-rheumatic activity. The nucleic acid molecules are useful for
CC   reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 2 A; 4 C; 7 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   62.5%;  Pred. No. 1.8e+02;
  Matches   10;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1007 GATGAACAGTGTGTGG 1022
              | :|| |||:|:|:||
Db          1 GCUGACCAGUGUGUGG 16


RESULT 152
AAT11728
ID   AAT11728 standard; DNA; 18 BP.
```

```
XX
AC   AAT11728;
XX
DT   25-MAR-2003  (updated)
DT   18-JUL-1996  (first entry)
XX
DE   Polycystic kidney disease 1 gene antisense primer, NKG9-R07.
XX
KW   Polycystic kidney disease; PKD1; autosomal dominant; ADPKD; mutation;
KW   exon; short arm; chromosome 16; repeated region; alternative splicing;
KW   extracellular matrix proteins; antibody; detection; diagnosis;
KW   mini gene therapy; single strand conformational polymorphism analysis;
KW   SSCP; primer; amplify; ss.
XX
OS   Synthetic.
XX
PN   WO9534573-A1.
XX
PD   21-DEC-1995.
XX
PF   02-JUN-1995;   95WO-US07079.
XX
PR   30-MAR-1995;   95US-0413580.
PR   03-JUN-1994;   94US-0253524.
XX
PA   (BGHM ) BRIGHAM & WOMENS HOSPITAL.
PA   (MILL-) MILLENIUM PHARM INC.
XX
PI   Glucksmann S,  Reeders S,  Schneider M;
XX
DR   WPI; 1996-049618/05.
XX
PT   DNA encoding poly-cystic kidney disease gene product - for use in
PT   gene therapy of ADPKD, and in the evaluation of treatment for PKD
XX
PS   Example; Page 68; 126pp; English.
XX
CC   The sequences given in AAT11709-29 are primers which were used in
CC   single- stranded conformational polymorphism analysis (SSCP) of the
CC   polycystic kidney disease (PKD1) gene. Mutations in the PKD1 gene are
CC   associated with autosomal dominant polycystic kidney disease (ADPKD).
CC   Mutations within the PKD1 gene are responsible for approx. 90% of cases
CC   of ADPKD. The coding region of the PKD1 gene is complex and extensive.
CC   It covers approx. 60 kb and contains a total of 46 exons. It has been
CC   localised to within a 750 kb chromosomal region on the short arm of
CC   chromosome 16. Approximately the first two thirds of the PKD1 gene is
CC   duplicated several times in a transcribed fashion elsewhere in the
CC   genome. The PKD1 gene also contains extensive repeated regions of high
CC   GC content. A number of the exons have alternatively spliced forms
CC   giving rise to a number of cDNA clones. The PKD1 protein contains at
CC   least 5 distinct peptide domains which are likely to be involved in
CC   protein-protein and/or protein-carbohydrate interactions. It also shares
CC   amino acid similarity with a number of extracellular matrix proteins.
CC   Antibodies raised against the PKD1 protein may be used in the detection
CC   of mutant PKD1 and, therefore, diagnosis of ADPKD. Fragments of the PKD1
CC   gene may be used in "mini" gene therapy for the treatment of ADPKD.
CC   (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        801 GCAGCTGTTGTTGTCC 816
              ||||||| | |||||
Db          1 GCAGCTGTCGATGTCC 16


RESULT 153
AAZ22353/c
ID   AAZ22353 standard; DNA; 18 BP.
XX
AC   AAZ22353;
XX
DT   25-NOV-1999  (first entry)
XX
DE   Phosphorothioate antisense oligonucleotide directed against FAN mRNA.
XX
KW   Human; FAN; factor associated with N-SMase activation;
KW   tumor necrosis factor; antisense oligonucleotide; disease;
KW   inflammatory response; phosphorothioate; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5962671-A.
XX
PD   05-OCT-1999.
XX
PF   18-SEP-1998;   98US-0156425.
XX
PR   18-SEP-1998;   98US-0156425.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Cowsert LM;
XX
DR   WPI; 1999-571295/48.
XX
PT   Inhibition of the human FAN gene, useful for treating diseases
PT   associated with an inflammatory response -
XX
PS   Claim 3; Columns 27; 27pp; English.
XX
CC   AAZ22345-84 represent phosphorothiate antisense oligonucleotide which
CC   are directed against FAN (factor associated with N-SMase activation)
CC   mRNA. FAN is a mediator of tumor necrosis factor (TNF)-induced
CC   activation of N-SMase. The antisense oligonucleotides are 8-30
CC   nucleotides in length. The antisense oligonucleotides are useful
CC   for treating diseases associated with an inflammatory response.
XX
SQ   Sequence 18 BP; 4 A; 8 C; 1 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        966 GCAGCTGTTGTGGAGA 981
              | || |||||||||||
Db         17 GAAGATGTTGTGGAGA 2


RESULT 154
AAZ77396
ID   AAZ77396 standard; DNA; 18 BP.
XX
AC   AAZ77396;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Human biallelic marker downstream amplification primer SEQ ID NO:11752.
XX
KW   Human genome; biallelic marker; high density disequilibrium map;
KW   genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW   haplotyping; hybridisation; identification; characterisation;
KW   amplification; single nucleotide polymorphism; SNP; PCR primer;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954500-A2.
XX
PD   28-OCT-1999.
XX
PF   21-APR-1999;   99WO-IB00822.
```

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XX
PR   21-APR-1998;   98US-0082614.
PR   23-NOV-1998;   98US-0109732.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I;
XX
DR   WPI; 2000-013267/01.
XX
PT   Novel biallelic markers used to construct a high density disequilibrium
PT   map of the human genome  -
XX
PS   Claim 9; Page 2736; 2745pp; English.
XX
CC   AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC   invention, which contain a polymorphic base at position 24 of their
CC   nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC   primers for the biallelic markers. The biallelic markers of the
CC   invention have a variety of uses: they can be used for high density
CC   mapping of the human genome, and in complex association studies and
CC   haplotyping studies which are useful in determining the genetic basis
CC   for disease states. Compositions and methods of the invention can also
CC   be useful for the identification of the targets for the development of
CC   pharmaceutical agents and diagnostic methods, as well as the
CC   characterisation of the differential efficacious responses to and side
CC   effects from pharmaceutical agents acting on a disease as well as other
CC   treatment.
CC   N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297
CC   and 3367, are not actually given a sequence in the Sequence Listing
CC   from the present invention.
XX
SQ   Sequence 18 BP; 6 A; 1 C; 7 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        687 AAGATACTGATTGCTG 702
              ||||||||||| | ||
Db          1 AAGATACTGATAGGTG 16


RESULT 155
AAC64937
ID   AAC64937 standard; DNA; 18 BP.
XX
AC   AAC64937;
XX
DT   07-FEB-2001  (first entry)
XX
DE   Human prostate-related PS108 gene sequencing primer SEQ ID NO: 25.
XX
KW   Human; prostate cancer; PS108; antibody; tumour; metastasis;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   US6130043-A.
XX
PD   10-OCT-2000.
XX
PF   01-MAY-1998;   98US-0071710.
XX
PR   02-MAY-1997;   97US-0850713.
XX
PA   (ABBO ) ABBOTT LAB.
XX
PI   Cohen M,  Colpitts TL,  Friedman PN,  Gordon J,  Granados EN;
PI   Billing-Medel PA,  Klass MR,  Roberts-Rapp L,  Stroupe SD,  Yu H;
PI   Kratochvil JD,  Russell JC,  Hodges SC;
XX
DR   WPI; 2000-655655/63.
XX
PT   Methods for detecting target prostate-specific polynucleotides or
PT   diseases of the prostate (e.g. prostate cancer), comprising detecting
PT   the presence of any of PS108 nucleic acid sequences in a test sample -
XX
PS   Example 2; Column 81-82; 55pp; English.
XX
CC   The present invention is related to a number of partial coding and
CC   protein sequences for the human prostate tissue protein PS108. These
CC   sequences can be used in the diagnosis and prognosis of prostate
CC   diseases, particularly prostate cancer. They can also be used to produce
CC   antibodies which can be used in treatment. The present sequence is a
CC   PCR primer used in the isolation of the PS108 partial coding sequences.
XX
SQ   Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1034 TCCAAGCACTGGACTG 1049
              |||| |||||||| ||
Db          3 TCCATGCACTGGAATG 18


RESULT 156
AAA58717
ID   AAA58717 standard; RNA; 18 BP.
XX
AC   AAA58717;
XX
DT   20-OCT-2000  (first entry)
XX
DE   Nucleotide sequence of the N18 domain of a miniribozyme.
XX
KW   Miniribozyme; viral disease; herpes simplex virus; AIDS;
KW   inflammatory disease; arthritis; circulatory disorder; atherosclerosis;
KW   restenosis; psoriasis; cervical preneplasia; papilloma disease;
KW   bacterial infection; prokaryotic infection; neoplastic condition;
KW   chronic myeloid leukemia; anti-viral; anti-fungal; anti-bacterial;
KW   anti-parasitic; anti-protozoan; anthelminthic; herbicide; pesticide; ss.
XX
OS   Synthetic.
XX
PN   WO200039146-A1.
XX
PD   06-JUL-2000.
XX
PF   24-DEC-1999;   99WO-AU01162.
XX
PR   24-DEC-1998;   98AU-0007951.
XX
PA   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI   Conaty JF,  Hendry P,  Lockett TJ;
XX
DR   WPI; 2000-465731/40.
XX
PT   Miniribozyme compounds useful for cleaving a target mRNA in a host
PT   cell, e.g. for treating AIDS, arthritis, atherosclerosis, restenosis,
PT   bacterial and prokaryotic infection  -
XX
PS   Example; Fig 4; 81pp; English.
XX
CC   The specification describes miniribozyme compounds. The
CC   minirobozymes, or oligonucleotide transfer vectors containing a
CC   nucleotide sequence encoding the miniribozyme, are useful for cleaving
CC   a target mRNA in a host cell. They are especially used for treating
CC   viral diseases caused by herpes simplex virus or AIDS and other
CC   inflammatory diseases such as arthritis and circulatory disorders
CC   such as atherosclerosis and restenosis, psoriasis, cervical preneplasia,
CC   papilloma disease, bacterial and prokaryotic infection, neoplastic
CC   conditions associated with production of aberrant RNAs such as in
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CC   chronic myeloid leukemia. The miniribozymes may be combined with
CC   pharmaceutically or veterinarally acceptable carriers or may be
CC   supplemented in a composition with one or more anti-viral, anti-fungal,
CC   anti-bacterial, anti-parasitic, anti-protozoan or anthelminthic agents,
CC   herbicides or pesticides. AAA58685-A58761 represent sequences of the
CC   N18 domain of miniribozymes of the invention.
XX
SQ   Sequence 18 BP; 8 A; 5 C; 4 G; 1 U; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   81.2%;  Pred. No. 2e+02;
  Matches   13;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        779 CTGGAGAGACCACTAA 794
              |:| ||||||||| ||
Db          1 CUGAAGAGACCACGAA 16


RESULT 157
AAZ57739
ID   AAZ57739 standard; DNA; 18 BP.
XX
AC   AAZ57739;
XX
DT   05-APR-2000  (first entry)
XX
DE   Human G-alpha-12 antisense inhibitor ISIS# 20728.
XX
KW   G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer;
KW   cell growth; metastatic growth; ss; ISIS# 20728.
XX
OS   Homo sapiens.
XX
PN   US5998206-A.
XX
PD   07-DEC-1999.
XX
PF   23-FEB-1999;   99US-0256496.
XX
PR   23-FEB-1999;   99US-0256496.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Cowsert LM;
XX
DR   WPI; 2000-095920/08.
XX
PT   Antisense inhibition of human G-alpha-12 expression  -
XX
PS   Example 15; Column 39; 36pp; English.
XX
CC   This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is
CC   a member of the G12/13 subfamily of G-proteins. The primary function of
CC   G-alpha-12 is in cell differentiation and growth. The invention relates
CC   to antisense compounds which are 8-30 nucleotides long
CC   (see AAZ57668-Z57746). The antisense molecules are targeted to the human
CC   G-alpha-12 nucleic acid molecule, and inhibit the expression of
CC   G-alpha-12. The molecules preferably have a modified internucleotide
CC   linkage, and at least one modified sugar moiety. The compounds target
CC   different regions of the human G-alpha-12 RNA. The expression of human
CC   G-alpha 12 is inhibited by contacting human cells or tissues in vitro
CC   with the antisense molecules. The oligonucleotides are used in
CC   modulating the function of nucleic acid molecules encoding G-alpha-12,
CC   ultimately modulating the amount of G-alpha-12 produced. The antisense
CC   compounds can be utilized for diagnostics, therapeutics, prophylaxis and
CC   as research agents and kits. They may be useful in the treatment of
CC   cancer, and metastatic growth.
XX
SQ   Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1032 TTTCCAAGCACTGGAC 1047
              | || ||||||||||
Db          3 TGTCGAAGCACTGGAC 18


RESULT 158
AAZ35867/c
ID   AAZ35867 standard; DNA; 18 BP.
XX
AC   AAZ35867;
XX
DT   03-FEB-2000  (first entry)
XX
DE   Human sentrin phosphorothioate antisense oligonucleotide SEQ ID NO:9.
XX
KW   Human; sentrin; antisense oligonucleotide; phosphorothioate;
KW   inhibition; modulation; expression; diagnosis; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..18
FT                    /*tag=  a
FT                    /note= "phosphorothioate linkages"
XX
PN   US5985664-A.
XX
PD   16-NOV-1999.
XX
PF   17-DEC-1998;   98US-0213768.
XX
PR   17-DEC-1998;   98US-0213768.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Baker BF,  Cowsert LM;
XX
DR   WPI; 2000-022284/02.
XX
PT   Antisense compound which modulates human sentrin expression, useful for
PT   treating diseases associated with sentrin expression -
XX
PS   Example 15; Column 38; 29pp; English.
XX
CC   The present invention describes an antisense compound (I) 8-30
CC   nucleotides long targeted to a nucleic acid molecule encoding human
CC   sentrin. The antisense compound comprises a phosphorothioate antisense
CC   oligonucleotide which inhibits expression of human sentrin. (I) is
CC   useful for inhibiting expression of sentrin in human cells or tissues
CC   in vitro, for treating humans or other animals suspected of having or
CC   being prone to a disease associated with sentrin expression. (I) can
CC   also be used for research or diagnostic purposes. The present
CC   sequence represents a human sentrin phosphorothioate antisense
CC   oligonucleotide from the present invention.
XX
SQ   Sequence 18 BP; 4 A; 6 C; 4 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        680 GCAGCGGAAGATACTG 695
              | |||||||| |||||
Db         17 GTAGCGGAAGTTACTG 2


RESULT 159
AAS07164
ID   AAS07164 standard; DNA; 18 BP.
XX
AC   AAS07164;
```

```
XX
DT   23-OCT-2001  (first entry)
XX
DE   Prostate-specific gene PS108 sequencing primer #7.
XX
KW   Prostate; PS108; immunogen; drug screening; image localisation; ss;
KW   diagnostic; therapeutic; prostate tissue disease; cancer; metastasis;
KW   sequencing primer.
XX
OS   Synthetic.
XX
PN   US6252047-B1.
XX
PD   26-JUN-2001.
XX
PF   15-MAR-2000; 2000US-0525397.
XX
PR   01-MAY-1998;   98US-0071710.
PR   02-MAY-1997;   97US-0850713.
XX
PA   (ABBO ) ABBOTT LAB.
XX
PI   Billing-Medel PA,  Cohen M,  Colpitts TL,  Friedman PN,  Gordon J;
PI   Granados EN,  Hodges SC,  Klass MR,  Kratochvil JD,  Roberts-Rapp L;
PI   Russell JC,  Stroupe SD,  Yu H;
XX
DR   WPI; 2001-424488/45.
XX
PT   Novel PS108 polypeptide useful in assays for detecting antibodies to
PT   prostate tissue, and as immunogens to produce PS108 antibodies  -
XX
PS   Example 2; Column 81; 55pp; English.
XX
CC   The sequence represents sequencing primer #7 used in sequencing of
CC   prostate gene PS108-specific expressed sequence tag (EST) cDNA clones.
CC   The ESTs were used along with other overlapping cDNA clones to produce a
CC   full length consensus sequence (see AAS07155). This sequence could then
CC   be used to produce PS108 polypeptides which are useful in assays for
CC   detecting antibodies to prostate tissue, and as immunogens to produce
CC   antibodies. The polypeptide is useful for screening compounds which
CC   specifically bind to the polypeptide and for screening for drugs,
CC   compounds, or any other agent which can be used to treat diseases
CC   associated with PS108. The antibody is useful to detect, or for image
CC   localisation of PS108 antigen in a patient, for detecting or diagnosing a
CC   disease or condition, as delivery agents for therapeutic agents as well
CC   as for diagnostic tests and for screening for diseases or conditions
CC   associated with PS108, especially cancer. The antibody is also useful for
CC   generating chimeric antibodies for therapeutic use, for inhibiting the
CC   biological activity of PS108, in therapy (for e.g. to treat prostate
CC   tissue disease including prostate cancer and its metastases), and to
CC   detect the presence of any polypeptide in a test sample which shares one
CC   or more antigenic determinants with the PS108 polypeptide.
XX
SQ   Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1034 TCCAAGCACTGGACTG 1049
              |||| |||||||| ||
Db          3 TCCATGCACTGGAATG 18


RESULT 160
AAF26684
ID   AAF26684 standard; DNA; 18 BP.
XX
AC   AAF26684;
XX
DT   02-APR-2001  (first entry)
XX
DE   Human Smad7 phosphorothioate antisense oligonucleotide SEQ ID NO:27.
XX
KW   Human; Smad7; antisense oligonucleotide; phosphorothioate; inhibition;
KW   antiinflammatory; cytostatic; infection; inflammation; tumour formation;
KW   ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..18
FT                    /*tag=  a
FT                    /note= "phosphorothioate linkages"
XX
PN   US6159697-A.
XX
PD   12-DEC-2000.
XX
PF   09-JAN-2000; 2000US-0487444.
XX
PR   09-JAN-2000; 2000US-0487444.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM;
XX
DR   WPI; 2001-070108/08.
XX
PT   Antisense compound capable of inhibiting the expression of human Smad7,
PT   useful for preventing or delaying infection, inflammation or tumor
PT   formation  -
XX
PS   Claim 1; Column 41; 33pp; English.
XX
CC   The present invention describes an antisense compound (I) of up to 30
CC   nucleobases in length capable of inhibiting the expression of human
CC   Smad7. (I) has antiinflammatory and cytostatic, and is a modulator of
CC   Smad7 expression. (I) can be useful for inhibiting the expression of
CC   human Smad7 in human cells or tissues, in vitro. (I) is commonly used
CC   as a research reagent and in diagnostics for example, to elucidate the
CC   function of particular genes. (I) is also useful for distinguishing
CC   between functions of various members of a biological pathway and for
CC   research use. (I) is also utilised for diagnostics, therapeutics,
CC   prophylaxis and in kits. (I) is also useful prophylactically, e.g. to
CC   prevent or delay infection, inflammation or tumour formation. AAF26667
CC   to AAF26706 represent human Smad7 antisense oligonucleotides from the
CC   present invention.
XX
SQ   Sequence 18 BP; 5 A; 6 C; 3 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        851 CCTGGTGTACCAATAG 866
              ||| |||||||||| ||
Db          2 CCTTGTGTACCAACAG 17


RESULT 161
AAF64104
ID   AAF64104 standard; DNA; 18 BP.
XX
AC   AAF64104;
XX
DT   06-APR-2001  (first entry)
XX
DE   Primer #48.
XX
KW   Human; lipoprotein lipase; LPL; stenosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200102606-A2.
XX
```

```
PD   11-JAN-2001.
XX
PF   30-JUN-2000; 2000WO-US18308.
XX
PR   02-JUL-1999;   99US-0347114.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Taylor KD,  Scheuner M,  Rotter J,  Yang H;
XX
DR   WPI; 2001-138155/14.
XX
PT   Genetic testing for determining non-responsiveness to statin drug in
PT   patients of a coronary artery disease, involves analyzing amplification
PT   products for homozygosity for a variant allele in the human lipoprotein
PT   lipase gene -
XX
PS   Claim 11; Page 18; 74pp; English.
XX
CC   The present invention relates to detecting a genetic predisposition
CC   in a human subject for non-responsiveness to statin drug treatment,
CC   involving amplifying nucleic acids including a non-coding or
CC   untranslated region within the 3' end of the human lipoprotein
CC   lipase (LPL) gene from a tissue sample. The method is useful for
CC   determining which patients suffering from coronary artery disease,
CC   or which coronary artery bypass graft (CABG) patients, will likely
CC   not respond positively to statin drug treatment with respect to
CC   stenosis of a coronary artery or bypass graft.
XX
SQ   Sequence 18 BP; 4 A; 8 C; 2 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        887 CACCCATGTCTACCAA 902
              |||||||||| |||| |
Db          2 CACCCATGTGTACCCA 17


RESULT 162
AAF64115
ID   AAF64115 standard; DNA; 18 BP.
XX
AC   AAF64115;
XX
DT   06-APR-2001  (first entry)
XX
DE   Primer #59.
XX
KW   Human; lipoprotein lipase; LPL; stenosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200102606-A2.
XX
PD   11-JAN-2001.
XX
PF   30-JUN-2000; 2000WO-US18308.
XX
PR   02-JUL-1999;   99US-0347114.
XX
PA   (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI   Taylor KD,  Scheuner M,  Rotter J,  Yang H;
XX
DR   WPI; 2001-138155/14.
XX
PT   Genetic testing for determining non-responsiveness to statin drug in
PT   patients of a coronary artery disease, involves analyzing amplification
PT   products for homozygosity for a variant allele in the human lipoprotein
PT   lipase gene -
XX
PS   Claim 11; Page 18; 74pp; English.
XX
CC   The present invention relates to detecting a genetic predisposition
CC   in a human subject for non-responsiveness to statin drug treatment,
CC   involving amplifying nucleic acids including a non-coding or
CC   untranslated region within the 3' end of the human lipoprotein
CC   lipase (LPL) gene from a tissue sample. The method is useful for
CC   determining which patients suffering from coronary artery disease,
CC   or which coronary artery bypass graft (CABG) patients, will likely
CC   not respond positively to statin drug treatment with respect to
CC   stenosis of a coronary artery or bypass graft.
XX
SQ   Sequence 18 BP; 5 A; 7 C; 2 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        887 CACCCATGTCTACCAA 902
              |||||||||| |||| |
Db          1 CACCCATGTGTACCCA 16


RESULT 163
AAL49523
ID   AAL49523 standard; DNA; 18 BP.
XX
AC   AAL49523;
XX
DT   22-NOV-2002  (first entry)
XX
DE   Human PS108 coding sequence PCR primer SEQ ID NO: 25.
XX
KW   Human; PS108; prostate cancer; prostate specific sequence; prostate;
KW   cytostatic; gene therapy; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002086301-A1.
XX
PD   04-JUL-2002.
XX
PF   25-APR-2001; 2001US-0841894.
XX
PR   01-MAY-1998;   98US-0071710.
PR   02-MAY-1997;   97US-0850713.
XX
PA   (BILL/) BILLINGEL P A.
PA   (COHE/) COHEN M.
PA   (COLP/) COLPITTS T L.
PA   (FRIE/) FRIEDMAN P N.
PA   (GORD/) GORDON J.
PA   (GRAN/) GRANADOS E N.
PA   (HODG/) HODGES S C.
PA   (KLAS/) KLASS M R.
PA   (KRAT/) KRATOCHVIL J D.
PA   (ROBE/) ROBERTS-RAPP L A.
PA   (RUSS/) RUSSELL J C.
PA   (STRO/) STROUPE S D.
PA   (YUHH/) YU H.
XX
PI   Billingel PA,  Cohen M,  Colpitts TL,  Friedman PN,  Gordon J;
PI   Granados EN,  Hodges SC,  Klass MR,  Kratochvil JD,  Roberts-Rapp LA;
PI   Russell JC,  Stroupe SD,  Yu H;
XX
DR   WPI; 2002-665428/71.
XX
PT   Novel PS108 polynucleotides derived from the PS108 gene, useful for
PT   detecting, diagnosing, staging, monitoring, prognosticating, in vivo
PT   imaging, preventing or treating diseases and conditions of prostate
PT   e.g., prostate cancer -
XX
PS   Example 2; Page 44; 59pp; English.
```

```
XX
CC   The present invention relates to polynucleotide sequences derived from
CC   the human PS108 gene and capable of selectively hybridising to the PS108
CC   gene. The sequences can be used to detect the presence of a target PS108
CC   polynucleotide in a test sample, and to detect, monitor, prevent or treat
CC   diseases and conditions of the prostate, such as prostate cancer. The
CC   present sequence is a PCR primer described in the exemplification of the
CC   invention.
XX
SQ   Sequence 18 BP; 4 A; 5 C; 5 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1034 TCCAAGCACTGGACTG 1049
              |||| |||||||| ||
Db          3 TCCATGCACTGGAATG 18


RESULT 164
ABQ65415
ID   ABQ65415 standard; DNA; 18 BP.
XX
AC   ABQ65415;
XX
DT   20-AUG-2002  (first entry)
XX
DE   Human gene methylation status determination oligo SEQ ID NO: 27.
XX
KW   Toxicological diagnosis; DNA methylation; methylation status;
KW   toxic response; human; ds.
XX
OS   Homo sapiens.
XX
PN   WO200240710-A2.
XX
PD   23-MAY-2002.
XX
PF   08-NOV-2001; 2001WO-EP12951.
XX
PR   14-NOV-2000; 2000DE-1056802.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2002-463571/49.
XX
PT   Toxicological diagnosis, useful for diagnosis and prognosis of adverse
PT   reactions, based on effect of test compounds on methylation status of
PT   selected genes, involves determining changes in DNA methylation status
PT   -
XX
PS   Disclosure; Page 111; 113pp; German.
XX
CC   The present invention relates to a method of toxicological diagnosis,
CC   involving taking a DNA-containing sample from an organism or cell culture
CC   that has been treated with a test compound and determining any changes in
CC   the DNA methylation status or pattern caused by said test compound. The
CC   method is used for diagnosis and prognosis of adverse toxic responses in
CC   individuals. The present sequence is a human sequence used to demonstrate
CC   the method of the invention.
XX
SQ   Sequence 18 BP; 2 A; 1 C; 7 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        871 TGTTATTCAGACTTGG 886
              |||||||| || ||||
Db          2 TGTTATTCGGAGTTGG 17


RESULT 165
ABZ10447
ID   ABZ10447 standard; DNA; 18 BP.
XX
AC   ABZ10447;
XX
DT   16-JAN-2003  (first entry)
XX
DE   Haematopoietic cell proliferation disorder related oligonucleotide #587.
XX
KW   Human; haematopoietic cell proliferation disorder; cytostatic;
KW   gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW   cytosine methylation state; probe; primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200277272-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-EP03401.
XX
PR   26-MAR-2001; 2001US-278333P.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Berlin K,  Braun A,  Distler J,  Guetig D,  Howe A,  Mueller J;
PI   Olek A,  Piepenbrock C,  Adorjan P,  Grabs G,  Lesche R,  Leu E;
PI   Lewin A,  Lipscher E,  Maier S,  Model F,  Mueller V,  Otto T;
PI   Pelet C,  Schwope I,  Ziebarth H;
XX
DR   WPI; 2003-018942/01.
XX
PT   Detecting and differentiating between hematopoietic cell proliferative
PT   disorders, comprises contacting a target nucleic acid with a reagent
PT   that distinguishes between methylated and non-methylated CpG
PT   dinucleotides -
XX
PS   Claim 15; SEQ ID 587; 117pp; English.
XX
CC   The present invention describes a method for detecting and
CC   differentiating between haematopoietic cell proliferative disorders
CC   associated with at least 1 gene and/or their regulatory regions in a
CC   subject. The method comprises contacting a target nucleic acid in a
CC   biological sample obtained from the subject with at least 1 reagent,
CC   which distinguishes between methylated and non-methylated CpG
CC   dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC   represent specifically claimed nucleotide sequences from the present
CC   invention. Oligonucleotides from the present invention can be used: for
CC   differentiating between healthy haematopoietic cells and proliferative
CC   disorder haematopoietic cells; for differentiating between acute
CC   lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC   determining the cytosine methylation state and/or single nucleotide
CC   polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC   related sequences and their complements; and as primers for the
CC   amplification of haematopoietic cell proliferation disorder related
CC   DNA sequences. The nucleotide sequences from the present invention can
CC   also be used for detecting a predisposition to, differentiation between
CC   subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC   haematopoietic cell proliferative disorders. The present method enables
CC   a highly specific classification of haematopoietic cell proliferative
CC   disorders allowing for improved and informed treatment of patients.
XX
SQ   Sequence 18 BP; 2 A; 1 C; 7 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        871 TGTTATTCAGACTTGG 886
```

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                 ||||||||| || ||||
Db          2 TGTTATTCGGAGTTGG 17


RESULT 166
ABZ10939/c
ID   ABZ10939 standard; DNA; 18 BP.
XX
AC   ABZ10939;
XX
DT   16-JAN-2003  (first entry)
XX
DE   Haematopoietic cell proliferation disorder related oligonucleotide #1079.
XX
KW   Human; haematopoietic cell proliferation disorder; cytostatic;
KW   gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW   cytosine methylation state; probe; primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200277272-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-EP03401.
XX
PR   26-MAR-2001; 2001US-278333P.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Berlin K,  Braun A,  Distler J,  Guetig D,  Howe A,  Mueller J;
PI   Olek A,  Piepenbrock C,  Adorjan P,  Grabs G,  Lesche R,  Leu E;
PI   Lewin A,  Lipscher E,  Maier S,  Model F,  Mueller V,  Otto T;
PI   Pelet C,  Schwope I,  Ziebarth H;
XX
DR   WPI; 2003-018942/01.
XX
PT   Detecting and differentiating between hematopoietic cell proliferative
PT   disorders, comprises contacting a target nucleic acid with a reagent
PT   that distinguishes between methylated and non-methylated CpG
PT   dinucleotides -
XX
PS   Claim 15; Page 71; 117pp; English.
XX
CC   The present invention describes a method for detecting and
CC   differentiating between haematopoietic cell proliferative disorders
CC   associated with at least 1 gene and/or their regulatory regions in a
CC   subject. The method comprises contacting a target nucleic acid in a
CC   biological sample obtained from the subject with at least 1 reagent,
CC   which distinguishes between methylated and non-methylated CpG
CC   dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC   represent specifically claimed nucleotide sequences from the present
CC   invention. Oligonucleotides from the present invention can be used: for
CC   differentiating between healthy haematopoietic cells and proliferative
CC   disorder haematopoietic cells; for differentiating between acute
CC   lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC   determining the cytosine methylation state and/or single nucleotide
CC   polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC   related sequences and their complements; and as primers for the
CC   amplification of haematopoietic cell proliferation disorder related
CC   DNA sequences. The nucleotide sequences from the present invention can
CC   also be used for detecting a predisposition to, differentiation between
CC   subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC   haematopoietic cell proliferative disorders. The present method enables
CC   a highly specific classification of haematopoietic cell proliferative
CC   disorders allowing for improved and informed treatment of patients.
XX
SQ   Sequence 18 BP; 8 A; 4 C; 2 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        983 GTTGATTTTGAGATTA 998
              ||| |||| |||||||
Db         18 GTTTATTTCGAGATTA 3


RESULT 167
ABZ11023
ID   ABZ11023 standard; DNA; 18 BP.
XX
AC   ABZ11023;
XX
DT   16-JAN-2003  (first entry)
XX
DE   Haematopoietic cell proliferation disorder related oligonucleotide #1163.
XX
KW   Human; haematopoietic cell proliferation disorder; cytostatic;
KW   gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW   cytosine methylation state; probe; primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200277272-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-EP03401.
XX
PR   26-MAR-2001; 2001US-278333P.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Berlin K,  Braun A,  Distler J,  Guetig D,  Howe A,  Mueller J;
PI   Olek A,  Piepenbrock C,  Adorjan P,  Grabs G,  Lesche R,  Leu E;
PI   Lewin A,  Lipscher E,  Maier S,  Model F,  Mueller V,  Otto T;
PI   Pelet C,  Schwope I,  Ziebarth H;
XX
DR   WPI; 2003-018942/01.
XX
PT   Detecting and differentiating between hematopoietic cell proliferative
PT   disorders, comprises contacting a target nucleic acid with a reagent
PT   that distinguishes between methylated and non-methylated CpG
PT   dinucleotides -
XX
PS   Claim 15; Page 44; 117pp; English.
XX
CC   The present invention describes a method for detecting and
CC   differentiating between haematopoietic cell proliferative disorders
CC   associated with at least 1 gene and/or their regulatory regions in a
CC   subject. The method comprises contacting a target nucleic acid in a
CC   biological sample obtained from the subject with at least 1 reagent,
CC   which distinguishes between methylated and non-methylated CpG
CC   dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC   represent specifically claimed nucleotide sequences from the present
CC   invention. Oligonucleotides from the present invention can be used: for
CC   differentiating between healthy haematopoietic cells and proliferative
CC   disorder haematopoietic cells; for differentiating between acute
CC   lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC   determining the cytosine methylation state and/or single nucleotide
CC   polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC   related sequences and their complements; and as primers for the
CC   amplification of haematopoietic cell proliferation disorder related
CC   DNA sequences. The nucleotide sequences from the present invention can
CC   also be used for detecting a predisposition to, differentiation between
CC   subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC   haematopoietic cell proliferative disorders. The present method enables
CC   a highly specific classification of haematopoietic cell proliferative
CC   disorders allowing for improved and informed treatment of patients.
XX
SQ   Sequence 18 BP; 2 A; 1 C; 7 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
```

```
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        871 TGTTATTCAGACTTGG 886
              |||||||| || ||||
Db          2 TGTTATTCGGAGTTGG 17


RESULT 168
ABZ11025/c
ID   ABZ11025 standard; DNA; 18 BP.
XX
AC   ABZ11025;
XX
DT   16-JAN-2003  (first entry)
XX
DE   Haematopoietic cell proliferation disorder related oligonucleotide #1165.
XX
KW   Human; haematopoietic cell proliferation disorder; cytostatic;
KW   gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW   cytosine methylation state; probe; primer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200277272-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-EP03401.
XX
PR   26-MAR-2001; 2001US-278333P.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Berlin K,  Braun A,  Distler J,  Guetig D,  Howe A,  Mueller J;
PI   Olek A,  Piepenbrock C,  Adorjan P,  Grabs G,  Lesche R,  Leu E;
PI   Lewin A,  Lipscher E,  Maier S,  Model F,  Mueller V,  Otto T;
PI   Pelet C,  Schwope I,  Ziebarth H;
XX
DR   WPI; 2003-018942/01.
XX
PT   Detecting and differentiating between hematopoietic cell proliferative
PT   disorders, comprises contacting a target nucleic acid with a reagent
PT   that distinguishes between methylated and non-methylated CpG
PT   dinucleotides -
XX
PS   Claim 15; Page 76; 117pp; English.
XX
CC   The present invention describes a method for detecting and
CC   differentiating between haematopoietic cell proliferative disorders
CC   associated with at least 1 gene and/or their regulatory regions in a
CC   subject. The method comprises contacting a target nucleic acid in a
CC   biological sample obtained from the subject with at least 1 reagent,
CC   which distinguishes between methylated and non-methylated CpG
CC   dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
CC   represent specifically claimed nucleotide sequences from the present
CC   invention. Oligonucleotides from the present invention can be used: for
CC   differentiating between healthy haematopoietic cells and proliferative
CC   disorder haematopoietic cells; for differentiating between acute
CC   lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC   determining the cytosine methylation state and/or single nucleotide
CC   polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC   related sequences and their complements; and as primers for the
CC   amplification of haematopoietic cell proliferation disorder related
CC   DNA sequences. The nucleotide sequences from the present invention can
CC   also be used for detecting a predisposition to, differentiation between
CC   subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC   haematopoietic cell proliferative disorders. The present method enables
CC   a highly specific classification of haematopoietic cell proliferative
CC   disorders allowing for improved and informed treatment of patients.
XX
SQ   Sequence 18 BP; 8 A; 7 C; 1 G; 2 T; 0 other;

  Query Match             0.6%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        871 TGTTATTCAGACTTGG 886
              |||||||| || ||||
Db         17 TGTTATTCGGAGTTGG 2


RESULT 169
ABF08122/c
ID   ABF08122 standard; DNA; 13 BP.
XX
AC   ABF08122;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 108119 for detecting SNP TSC0027079.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 108119; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 1 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        935 GTACTAAAAATAA 947
              :|||||||||||||
Db         13 RTACTAAAAATAA 1


RESULT 170
ABF08123
ID   ABF08123 standard; DNA; 13 BP.
```

```
XX
AC   ABF08123;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 108120 for detecting SNP TSC0027079.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 108120; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 1 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        935 GTACTAAAAATAA 947
              :||||||||||||
Db          1 RTACTAAAAATAA 13


RESULT 171
ABH41078
ID   ABH41078 standard; DNA; 13 BP.
XX
AC   ABH41078;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 241055 for detecting SNP TSC0058794.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 241055; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 3 G; 7 T; 1 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATTC 878
              ||||||||||||:
Db          1 GGTTATGTTATTY 13


RESULT 172
ABH41079/c
ID   ABH41079 standard; DNA; 13 BP.
XX
AC   ABH41079;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 241056 for detecting SNP TSC0058794.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
```

```
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status -
XX
PS   Claim 1; SEQ ID 241056; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 3 C; 0 G; 2 T; 1 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATTC 878
              ||||||||||||:
Db         13 GGTTATGTTATTY 1


RESULT 173
ABK47356
ID   ABK47356 standard; DNA; 15 BP.
XX
AC   ABK47356;
XX
DT   18-JUN-2002  (first entry)
XX
DE   Human Angiotensin receptor 1 allele specific oligonucleotide primer #1.
XX
KW   Human; ss; primer; angiotensin receptor 1; AGTR1; SNP; hypotensive;
KW   hypertension; chromosome 3q21-q25; single-nucleotide polymorphism;
KW   haplotype; genotype; drug screening.
XX
OS   Homo sapiens.
XX
PN   EP1184456-A2.
XX
PD   06-MAR-2002.
XX
PF   12-JUN-2001; 2001EP-0114230.
XX
PR   28-AUG-2000; 2000US-228542P.
PR   30-MAY-2001; 2001US-0867915.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Koshy B,  Finkel K,  Lee HH;
XX
DR   WPI; 2002-282840/33.
XX
PT   Novel genetic variants of Angiotensin Receptor 1 isogenes, useful for
PT   improving efficiency and reliability in drug development for treating
PT   diseases associated with AGTR1 activity, e.g. hypertension -
XX
PS   Claim 17; Page 10; 44pp; English.
XX
CC   The invention relates to an isolated polynucleotide comprising a first
CC   nucleotide sequence which comprises a angiotensin receptor 1 (AGTR1)
CC   isogene selected from isogenes 1-8 and 10 given in the specification.
CC   Also included are methods of haplotyping/genotyping the AGTR1 gene
CC   of an individual, predicting a haplotype pair of an individual,
CC   identifying an association between a trait and at least one haplotype or
CC   haplotype pair of AGTR1 gene, oligonucleotides and primers for
CC   detecting polymorphisms in the AGTR1 gene, a recombinant non-human
CC   organism transformed or transfected with an AGTR1 gene, where the
CC   organism expresses a AGTR1 protein encoded by the AGTR1 gene or the
CC   polymorphic variant sequence, the polymorphic variant proteins of AGTR1,
CC   an anti-AGTR1 protein monoclonal antibody, a computer system for
CC   storing and analysing polymorphism data for the AGTR1 gene and
CC   a genome anthology for AGTR1 gene. The polypeptide is useful in screening
CC   for drugs targeting AGTR1 that are useful for treating hypertension. The
CC   methods are useful for improving the efficiency and reliability of
CC   several steps in the discovery and development of drugs for treating
CC   diseases associated with AGTR1 activity. The methods are also useful for
CC   screening compounds targeting AGTR1. The antibody is useful in
CC   diagnostic, prognostic and therapeutic methods. The AGTR1 gene is useful
CC   in studying the expression and function of AGTR1, and in expressing AGTR1
CC   protein for use in screening for candidate drugs to treat diseases
CC   related to AGTR1 activity. The AGTR1 gene is also useful in studying the
CC   effect of the variation on the biological activity of AGTR1 as well as on
CC   the binding affinity of candidate drugs targeting AGTR1 for the treatment
CC   of hypertension. The recombinant organism is useful for studying the
CC   expression of AGTR1 isogenes in vivo, for in vivo screening and testing
CC   of drugs targeted against AGTR1 protein, and for testing the efficacy of
CC   therapeutic agents and compounds for treating hypertension in a
CC   biological system. The gene for AGTR1 is located on chromosome
CC   3q21-q25. The present sequence is an allele specific oligonucleotide
CC   (ASO) primer used to detect polymorphisms in the AGTR1 gene.
XX
SQ   Sequence 15 BP; 2 A; 0 C; 3 G; 9 T; 1 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        864 TAGGTTATGTTAT 876
              ||||||||||||:|
Db          3 TAGGTTATGTTWT 15


RESULT 174
AAQ49762/c
ID   AAQ49762 standard; DNA; 18 BP.
XX
AC   AAQ49762;
XX
DT   25-MAR-2003  (updated)
DT   20-APR-1994  (first entry)
XX
DE   Membrane serine/threonine kinase receptor DNA primer.
XX
KW   MIS; Mullerian Inhibitory Substance; receptor;
KW   transforming growth factor; inhibin; BMP;
KW   bone morphogenesis protein; serine/threonine kinase receptor;
KW   PCR; polymerase chain reaction; primer; amplification; ss.
XX
OS   Synthetic.
XX
PN   WO9319177-A1.
XX
PD   30-SEP-1993.
XX
PF   15-MAR-1993;   93WO-US02387.
XX
PR   18-MAR-1992;   92US-0853396.
PR   11-MAR-1993;   93US-0029673.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Donahoe PK,  Gustafson M,  He WW;
XX
DR   WPI; 1993-320743/40.
XX
PT   New receptors of the transforming growth factor-beta receptor
```

```
PT   family - comprising Mullerian Inhibitory Substance Receptors and
PT   inhibin receptors
XX
PS   Disclosure; Page 23; 59pp; English.
XX
CC   The primers given in AAQ49761 and AAQ49762 were used in the isolation
CC   of four novel membrane serine/threonine kinase receptor cDNAs.
CC   Misr1 (AAQ49763) is believed to encode an isoform of the rat
CC   MIS receptor.  Misr2A/misr2B (AAQ49764), misr3 (AAQ49765) and misr4
CC   (AAQ49766) are believed to encode monomeric isoforms of the rat
CC   inhibin receptor and/or BMP receptor.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 18 BP; 3 A; 4 C; 4 G; 4 T; 3 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 18;
  Best Local Similarity   70.6%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        756 ATATGGGTCAAGAAGTC 772
              |:|||| :| |||:|||
Db         17 AYATGGCYCCAGARGTC 1


RESULT 175
AAT36073/c
ID   AAT36073 standard; cDNA; 18 BP.
XX
AC   AAT36073;
XX
DT   25-MAR-2003  (updated)
DT   30-OCT-1996  (first entry)
XX
DE   Transforming growth factor beta receptor superfamily PCR primer.
XX
KW   Mullerian inhibiting substance receptor; MISR; TGF-beta receptor;
KW   transforming growth factor beta type I receptor; gene therapy;
KW   wound healing; tumour treatment; rat inhibin;
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   US5538892-A.
XX
PD   23-JUL-1996.
XX
PF   04-NOV-1993;   93US-0149105.
XX
PR   04-NOV-1993;   93US-0149105.
PR   18-MAR-1992;   92US-0853396.
PR   11-MAR-1993;   93US-0029673.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (UYDU-) UNIV DUKE.
XX
PI   Donahoe PK,  Gustafson M,  He W,  Wang X;
XX
DR   WPI; 1996-353830/35.
XX
PT   New isolated TGF-beta type I receptor DNA - used to develop prods
PT   for diagnosis and therapy, e.g. for treating tumours or promoting
PT   wound healing
XX
PS   Disclosure; Column 14; 44pp; English.
XX
CC   Degenerate PCR primers were designed based on two highly conserved
CC   regions within the cDNA encoding a murine activin receptor, human
CC   and porcine TGF-beta type II receptor and the daf-1 receptor of
CC   C.elegans. The primers (see AAT36072 and AAT36073) were used for
CC   amplifying clones present in a 14.5 day foetal rat urogenital ridge
CC   cDNA COS cell expression library. Four clones encoding portions of
CC   four novel polypeptides (all putative serine/threonine kinases)
CC   were obtained and designated pGEM7-Misr1, 2, 3 and 4. The inserts
CC   from these clones were used as probes to isolate full-length cDNA
CC   sequences for each of the four TGF-beta type I receptors. Misr1 is
CC   believed to encode an isoform of the rat Mullerian Inhibiting
CC   Substance (MIS) receptor, while misr2A/misr2B, misr3 and misr4 are
CC   believed to encode monomeric isoforms of the rat inhibin receptor
CC   and/or BMP receptor.
CC   (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 18 BP; 3 A; 4 C; 4 G; 4 T; 3 other;

  Query Match             0.6%;  Score 12.6;  DB 1;  Length 18;
  Best Local Similarity   70.6%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    3;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        756 ATATGGGTCAAGAAGTC 772
              |:|||| :| |||:|||
Db         17 AYATGGCYCCAGARGTC 1


RESULT 176
AAT54860/c
ID   AAT54860 standard; RNA; 15 BP.
XX
AC   AAT54860;
XX
DT   25-MAR-2003  (updated)
DT   07-APR-1997  (first entry)
XX
DE   Mouse relA hammerhead ribozyme target sequence (nt. position 376).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome;
KW   AIDS; ss.
XX
OS   Mus musculus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB00156.
XX
PR   30-JAN-1995;   95US-0380734.
PR   23-FEB-1994;   94US-0201109.
PR   29-MAR-1994;   94US-0218934.
PR   04-APR-1994;   94US-0222795.
PR   07-APR-1994;   94US-0224483.
PR   15-APR-1994;   94US-0227958.
PR   15-APR-1994;   94US-0228041.
PR   18-MAY-1994;   94US-0245736.
PR   06-JUL-1994;   94US-0271280.
PR   15-AUG-1994;   94US-0291932.
PR   16-AUG-1994;   94US-0291433.
PR   17-AUG-1994;   94US-0292620.
PR   19-AUG-1994;   94US-0293520.
PR   02-SEP-1994;   94US-0300000.
PR   08-SEP-1994;   94US-0303039.
PR   23-SEP-1994;   94US-0311486.
PR   23-SEP-1994;   94US-0311749.
PR   28-SEP-1994;   94US-0314397.
PR   03-OCT-1994;   94US-0316771.
PR   07-OCT-1994;   94US-0319492.
PR   11-OCT-1994;   94US-0321993.
PR   04-NOV-1994;   94US-0334847.
PR   10-NOV-1994;   94US-0337608.
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PR   28-NOV-1994;   94US-0345516.
PR   16-DEC-1994;   94US-0357577.
PR   23-DEC-1994;   94US-0363233.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D;
PI   Thompson JD,  Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them  -
PT   for use in inhibiting disease related genes
XX
PS   Claim 2; Page 225; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA
CC   mRNA at the nucleotide base position indicated in the DE line.
CC   The relA gene product is a subunit of the transcriptional
CC   regulator NF-kappaB and is implicated specifically in the induction
CC   of inflammatory responses. Regions of the mRNA that do not form
CC   secondary folding structures and that contain potential hammerhead
CC   and hairpin ribozyme cleavage sites were identified by computer
CC   analysis. Ribozymes directed against these mRNA sequences were
CC   designed and synthesised with modifications that improve their
CC   nuclease resistance. The ribozymes are designed to cleave the
CC   target sequences and thereby inhibit relA expression, making them
CC   potentially useful for treating rheumatoid arthritis, restenosis
CC   and asthma as well as for increasing tolerance to transplanted
CC   tissues. The potential immunosuppressive properties of a ribozyme
CC   that cleaves relA mRNA means that uses are limited to local
CC   delivery, acute indications or ex vivo treatment.
CC   (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 15 BP; 2 A; 4 C; 5 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        777 CTCTGGAGAGACCA 790
              ||| ||||||||||
Db         15 CTCCGGAGAGACCA 2


RESULT 177
AAX28314/c
ID   AAX28314 standard; DNA; 15 BP.
XX
AC   AAX28314;
XX
DT   17-JUN-1999  (first entry)
XX
DE   PCR primer for Human CYP3A4 gene exon 7.
XX
KW   CYP3A4 gene polymorphism; polymorphic locus; human; altered metabolism;
KW   CYP3A4 substrate; drug-drug interaction identification; toxin exposure;
KW   genetic linkage detection; phenotypic variation; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9913106-A1.
XX
PD   18-MAR-1999.
XX
PF   02-SEP-1998;   98WO-US18158.
XX
PR   10-SEP-1997;   97US-0058612.
XX
PA   (AXYS-) AXYS PHARM INC.
XX
PI   Guida M,  Lichter JB;
XX
LR   WPI; 1999-215070/18.
XX
PT   New isolated CYP3A4 polymorphic sequences
XX
PS   Example; Page 18; 40pp; English.
XX
CC   This sequence represents a PCR primer for the human CYP3A4 gene.
CC   The invention relates to a CYP3A4 sequence polymorphism,
CC   which is part of a non-naturally occurring chromosome. Nucleic acids
CC   comprising the CYP3A4 polymorphic sequences can be used to screen
CC   patients for altered metabolism for CYP3A4 substrates, potential
CC   drug-drug interactions, and adverse/side effects as well as diseases that
CC   result from environmental or occupational exposure to toxins. They can
CC   also be used to establish animal, cell culture and in vitro cell-free
CC   models for drug metabolism. Polymorphic CYP3A4 gene sequences can be used
CC   for expression studies to determine the effect of promoter and/or intron
CC   sequence variations on mRNA expression and stability. The polymorphisms
CC   are also used as single nucleotide polymorphisms to detect genetic
CC   linkage to phenotypic variation in activity and expression of CYP3A4. The
CC   nucleic acids can also be used to generate genetically modified non-human
CC   animals or site specific gene modifications in cell lines.
XX
SQ   Sequence 15 BP; 5 A; 5 C; 4 G; 1 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        817 CTGCTGCCTTCAGG 830
              |||||| |||||||
Db         14 CTGCTGGCTTCAGG 1


RESULT 178
AAF47694
ID   AAF47694 standard; DNA; 15 BP.
XX
AC   AAF47694;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1114.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
```

PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 7; Page 51; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 1.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 898 ACCAAAGTTTACAA 911
||||||||||| ||
Db 2 ACCAAAGTTTAGAA 15

RESULT 179
AAF47695
ID AAF47695 standard; DNA; 15 BP.
XX
AC AAF47695;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #1115.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 7; Page 51; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 other;

Query Match 0.6%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 1.8e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 898 ACCAAAGTTTACAA 911
||||||||||| ||
Db 1 ACCAAAGTTTAGAA 14

RESULT 180
AAF47735/c
ID AAF47735 standard; DNA; 15 BP.
XX
AC AAF47735;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #1155.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 7; Page 51; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an

```
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 2 C; 3 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        904 GTTTACAATTCAAA 917
              |||||| |||||||
Db         15 GTTTACCATTCAAA 2


RESULT 181
AAF47738/c
ID   AAF47738 standard; DNA; 15 BP.
XX
AC   AAF47738;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #1158.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 7; Page 51; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 1 C; 4 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        902 AAGTTTACAATTCA 915
              ||||||| |||||
Db         14 AAGTTTACCATTCA 1


RESULT 182
AAL46568/c
ID   AAL46568 standard; DNA; 15 BP.
XX
AC   AAL46568;
XX
DT   08-AUG-2002  (first entry)
XX
DE   Human FAPalpha specific VL region from VH34 CDR1 DNA.
XX
KW   Human; FAPalpha; fibroblast activating protein alpha; antibody; Ab;
KW   gene therapy; cancer; wound healing; inflammation; cytostatic; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO200168708-A2.
XX
PD   20-SEP-2001.
XX
PF   16-MAR-2001; 2001WO-EP04716.
XX
PR   17-MAR-2000; 2000DE-1013286.
PR   11-SEP-2000; 2000GB-0022216.
XX
PA   (BOEH ) BOEHRINGER INGELHEIM PHARMA KG.
XX
PI   Park J,  Garin-Chesa P,  Pfizenmaier K,  Moosmayer D,  Mersmann M;
PI   Schmidt A;
XX
DR   WPI; 2002-041180/05.
DR   P-PSDB; AAO17623.
XX
PT   New human humanized antibody that specifically binds to fibroblasts
PT   activating protein alpha, useful for treating cancer or tumor, and for
PT   imaging tumors associated with activated stromal fibroblasts, e.g. lung
PT   or breast cancer  -
XX
PS   Disclosure; Fig 6E; 109pp; English.
XX
CC   The present invention relates to a human or humanised antibody (Ab) which
CC   specifically binds to fibroblast activating protein alpha (FAPalpha). The
CC   antibodies are useful for preparing a composition for the treatment of
CC   cancer, and for imaging tumours associated with activated stromal
CC   fibroblasts, such as colorectal cancer, non-small-cell lung cancer,
CC   breast cancer, head and neck cancer, ovarian cancer, lung cancer, bladder
CC   cancer, pancreatic cancer and metastatic brain cancer, and diseases
CC   associated with the same, such as inflammation and wound healing. The
CC   present sequence is a coding sequence described in the exemplification of
CC   the invention.
XX
SQ   Sequence 15 BP; 6 A; 6 C; 0 G; 3 T; 0 other;
```

```
  Query Match             0.6%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        750 TTGATAATATGGGT 763
              |||||| |||||||
Db         14 TTGATAGTATGGGT 1


RESULT 183
ABZ81747
ID   ABZ81747 standard; DNA; 15 BP.
XX
AC   ABZ81747;
XX
DT   11-JUN-2003  (first entry)
XX
DE   Oligonucleotide HDA3T15mer, used to treat Huntington's disease.
XX
KW   Huntington's disease; nootropic; anticonvulsant; phosphorothioate;
KW   huntingtin; human; gene therapy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..3
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages"
FT   modified_base   13..15
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "phosphorothioate linkages"
XX
PN   WO2003013437-A2.
XX
PD   20-FEB-2003.
XX
PF   07-AUG-2002; 2002WO-US25352.
XX
PR   07-AUG-2001; 2001US-310757P.
PR   08-AUG-2001; 2001US-310770P.
PR   08-AUG-2001; 2001US-310889P.
PR   04-DEC-2001; 2001US-337219P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Parekh-Olmedo H;
XX
DR   WPI; 2003-247928/25.
XX
PT   New single stranded oligonucleotides comprising a DNA domain having at
PT   least one mismatch with respect to the genetic sequence of the
PT   Huntington's disease gene to be altered, useful for treating or
PT   preventing Huntington's disease  -
XX
PS   Example 5; Page 71; 133pp; English.
XX
CC   The present sequence is that of oligonucleotide HDA3T15mer, which
CC   was designed for targeted alteration of the Huntington's disease
CC   (HD) gene.  The oligonucleotide is modified at each end, bearing
CC   phosphorothioate linkages in the 3 terminal bases, and targets
CC   the non-coding strand of the HD gene exon 1 triplet repeat region
CC   associated with HD.  Administration of this short oligonucleotide
CC   to neuronal PC12 cells bearing an HD exon 1-GFP fusion gene
CC   resulted in a decrease in Huntington protein (huntingtin)
CC   aggregation in cell culture studies.  HDA3T15mer is an example of
CC   oligonucleotides of the invention that alter the genomic HD gene
CC   sequence and/or (as in the present case) reduce the propensity of
CC   huntingtin to form intracellular aggregates.  Such oligonucleotides
CC   can be used for the treatment or prevention of HD.
XX
SQ   Sequence 15 BP; 1 A; 3 C; 5 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        797 TGTAGCAGCTGTTG 810
              ||| ||||||||||
Db          2 TGTTGCAGCTGTTG 15


RESULT 184
AAI64944
ID   AAI64944 standard; DNA; 16 BP.
XX
AC   AAI64944;
XX
DT   04-DEC-2001  (first entry)
XX
DE   Human Cream1 protein coding sequence intron 8/exon 9 junction.
XX
KW   Human; Cream1; repeat; transcriptional control factor; Rb;
KW   retinoblastoma protein; intron-exon junction; ds.
XX
OS   Homo sapiens.
XX
PN   CN1303861-A.
XX
PD   18-JUL-2001.
XX
PF   07-JAN-2000; 2000CN-0111426.
XX
PR   07-JAN-2000; 2000CN-0111426.
XX
PA   (SHAN-) SHANGHAI INST CYTOBIOLOGY CHINESE ACAD.
XX
PI   Zhu X,  Yan X,  Qian M;
XX
DR   WPI; 2001-566148/64.
XX
PT   New retinoblastoma protein binding protein, its preparation and
PT   application -
XX
PS   Disclosure; Fig 3B; 35pp; Chinese.
XX
CC   The present invention relates to the coding sequence of human Cream1,
CC   which is a protein containing a repetitive 86 amino acid motif. The
CC   protein is a transcriptional control factor, and is a conjugate of
CC   retinoblastoma protein (Rb). The present sequence is the an intron-exon
CC   junction in the coding sequence of the invention.
XX
SQ   Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 16;
  Best Local Similarity   92.9%;  Pred. No. 2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        676 CTTTGCAGCGGAAG 689
              |||| |||||||||
Db          3 CTTTCCAGCGGAAG 16


RESULT 185
AAX71584
ID   AAX71584 standard; RNA; 17 BP.
XX
AC   AAX71584;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #596.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
```

```
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 115; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 7 A; 2 C; 4 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   64.3%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1078 TGATAACTTTGGAA 1091
              :|| |||:::|||| 
Db          1 UGAAAACUUUGGAA 14


RESULT 186
AAQ03130/c
ID   AAQ03130 standard; cDNA; 17 BP.
XX
AC   AAQ03130;
XX
DT   25-MAR-2003  (updated)
DT   09-SEP-1990  (first entry)
XX
DE   Oligo probe 7 designed from amino acid sequence of native glucose oxidase
DE   (GO) from Aspergillus niger.
XX
KW   Glucose oxidase; Aspergillus niger; glucose oxidase oligo probe 7.
XX
OS   Aspergillus niger.
XX
PN   WO8912675-A.
XX
PD   28-DEC-1989.
XX
PF   20-JUN-1989;   89WO-US02696.
XX
PR   21-JUN-1988;   88US-0209530.
PR   19-JUN-1989;   89US-0366377.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Rosenberg S;
XX
DR   WPI; 1990-022535/03.
XX
PT   Recombinant polynucleotide(s) encoding glucose oxidase or a mutein -
PT   and vectors contg. them, secreting glucose oxidase or
PT   hyper-glycosylated analogues into medium
XX
PS   Disclosure; Page ?; 08pp; English.
XX
CC   An oligopeptide fragment of native enzyme GO from A. niger was purified
CC   and the amino acid sequence determined. Probe 7 was made from the region
CC   of lowest degeneracy. It has 48 fold degeneracy. Although it was
CC   designed to enable detection of cDNA sequences encoding GO in a lambda
CC   gt10 library, it was not found to be useful for detecting such clones.
CC   GO that is produced by the method of the patent is free of
CC   contaminants, esp. highly allergenic Aspergillus niger organisms. The
CC   high cost of purificn. is avoided.
CC   (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 17 BP; 6 A; 2 C; 1 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        911 ATTCAAAATGAGAA 924
              |||||| |||||||
Db         17 ATTCAATATGAGAA 4


RESULT 187
AAX69911
ID   AAX69911 standard; RNA; 17 BP.
XX
AC   AAX69911;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #1206.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
```

```
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 83; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 5 A; 1 C; 4 G; 7 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   42.9%;  Pred. No. 2.2e+02;
  Matches    6;  Conservative    7;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        978 GAGATGTTGATTTT 991
              ||||:|:: |::::
Db          2 GAGAUGUUAAUUUU 15


RESULT 188
AAX69912
ID   AAX69912 standard; RNA; 17 BP.
XX
AC   AAX69912;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #1207.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 83; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 5 A; 0 C; 5 G; 7 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   42.9%;  Pred. No. 2.2e+02;
  Matches    6;  Conservative    7;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        978 GAGATGTTGATTTT 991
              ||||:|:: |::::
Db          1 GAGAUGUUAAUUUU 14


RESULT 189
AAV95140/c
ID   AAV95140 standard; RNA; 17 BP.
XX
AC   AAV95140;
XX
DT   24-FEB-1999  (first entry)
XX
DE   Canine IL-2 receptor g-chain substrate position 536.
XX
KW   Human; IL-2 receptor g-chain; interleukin 2 receptor gamma chain;
KW   hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;
KW   autoimmune disease; psoriasis; allergy; inflammatory disease;
KW   graft rejection; ss.
XX
OS   Synthetic.
OS   Canis sp.
XX
PN   WO9824913-A2.
XX
PD   11-JUN-1998.
XX
PF   02-DEC-1997;   97WO-US21748.
XX
PR   03-DEC-1996;   96US-0758306.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   McSwiggen JA,  Stinchcomb DT;
XX
DR   WPI; 1998-333332/29.
XX
PT   Ribozymes targeted to interleukin 2 - useful for treating e.g.
PT   cancer, autoimmune disease and allergies
XX
PS   Claim 4; Page 46; 61pp; English.
XX
CC   The present sequence invention describes ribozymes targeted to modulate
CC   the synthesis and/or expression of interleukin (IL)-2R gamma encoded
CC   RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and
CC   AAV94575 to AAV95260 represent specifically claimed substrate sequences
CC   from the present invention. The ribozymes can be used for the treatment
CC   of, e.g. graft rejection, autoimmune disease, cancer, psoriasis,
CC   allergy and other inflammatory conditions. The ribozymes are also used
CC   to induce tolerance in a recipient to alloantigen from a donor.
XX
SQ   Sequence 17 BP; 5 A; 6 C; 3 G; 3 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        947 AGTGGTCCATGTGT 960
              |||||||| ||||
Db         17 AGTGGTCCAAGTGT 4


RESULT 190
```

AAA18677
ID AAA18677 standard; RNA; 17 BP.
XX
AC AAA18677;
XX
DT 19-JUN-2000 (first entry)
XX
DE Human TIE-2 substrate sequence SEQ ID NO:1903.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US06507.
XX
PR 27-MAR-1998; 98US-0079678.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, McSwiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or
PT stability of an mRNA encoding an angiogenic factors -
XX
PS Claim 56; Page 110; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with
CC RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ Sequence 17 BP; 6 A; 5 C; 1 G; 5 U; 0 other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 71.4%; Pred. No. 2.2e+02;
Matches 10; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1027 CAAAATTTCCAAGC 1040
|||| |:::||||||
Db 3 CAAUAUUUCCAAGC 16

RESULT 191
AAA20430
ID AAA20430 standard; RNA; 17 BP.
XX
AC AAA20430;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin alpha 6 subunit substrate sequence SEQ ID NO:3656.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US06507.
XX
PR 27-MAR-1998; 98US-0079678.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, McSwiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or
PT stability of an mRNA encoding an angiogenic factors -
XX
PS Claim 55; Page 145; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with
CC RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 U; 0 other;

```
  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 2.2e+02;
  Matches   10;  Conservative    3;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        793 AAGATGTAGCAGCT 806
              ||| :|:||||||:
Db          2 AAGGUGUAGCAGCU 15


RESULT 192
AAF01817
ID   AAF01817 standard; DNA; 17 BP.
XX
AC   AAF01817;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #112.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 58; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        870 ATGTTATTCAGACT 883
              ||| ||||||||||
Db          4 ATGGTATTCAGACT 17


RESULT 193
AAF01832
ID   AAF01832 standard; DNA; 17 BP.
XX
AC   AAF01832;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #127.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 58; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 4 A; 8 C; 1 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        889 CCCATGTCTACCAA 902
              ||||| ||||||||
Db          4 CCCATCTCTACCAA 17


RESULT 194
ABA78361/c
ID   ABA78361 standard; DNA; 17 BP.
XX
AC   ABA78361;
XX
DT   24-JAN-2002  (first entry)
XX
DE   CFTR mutation correcting oligonucleotide SEQ ID NO: 1207.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
```

```
PF   27-MAR-2001; 2001WO-US09761.
XX
PR   27-MAR-2000; 2000US-192176P.
PR   27-MAR-2000; 2000US-192179P.
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification -
XX
PS   Claim 7; Page 117; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention.
XX
SQ   Sequence 17 BP; 4 A; 6 C; 3 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        926 AGAGAGGATGTACT 939
              ||||||| ||||||
Db         17 AGAGAGGCTGTACT 4


RESULT 195
ABA78362
ID   ABA78362 standard; DNA; 17 BP.
XX
AC   ABA78362;
XX
DT   24-JAN-2002  (first entry)
XX
DE   CFTR mutation correcting oligonucleotide SEQ ID NO: 1208.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US09761.
XX
PR   27-MAR-2000; 2000US-192176P.
PR   27-MAR-2000; 2000US-192179P.
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification -
XX
PS   Claim 7; Page 117; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 6 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        926 AGAGAGGATGTACT 939
              ||||||| ||||||
Db          1 AGAGAGGCTGTACT 14


RESULT 196
ABK26179/c
ID   ABK26179 standard; DNA; 17 BP.
XX
AC   ABK26179;
XX
DT   09-APR-2002  (first entry)
XX
DE   Increased starch production genome altering oligonucleotide #31.
XX
KW   Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW   o-methyl modification; LNA modification; phosphorothioate linkage;
KW   DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW   abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW   amino acid over production; herbicide resistance; glyphosate resistance;
KW   imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW   porphyric herbicide resistance; triazine resistance; disease resistance;
KW   modified oil production; modified starch production; waxy starch;
KW   altered floral morphology; male-sterile plant; albino mutant;
KW   modified fatty acid content; reduced palmitate production; albino plant;
KW   increased stearate production; reduced linolenic acid production;
KW   photosynthetic process.
XX
OS   Arabidopsis thaliana.
OS   Synthetic.
```

```
XX
PN   WO200192512-A2.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-US17672.
XX
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
PR   27-MAR-2001; 2001US-0818875.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC,  Kim J;
XX
DR   WPI; 2002-106307/14.
XX
PT   New oligonucleotides with modified nuclease-resistant termini, useful
PT   for creating plants with desired phenotypes, e.g. stress tolerance,
PT   improved nutritional value, herbicide or disease resistance, or
PT   modified oil production  -
XX
PS   Claim 7; Page 136; 220pp; English.
XX
CC   The invention relates to an oligonucleotide for targeted alteration of a
CC   genetic sequence, which comprises a single-stranded oligonucleotide
CC   having a DNA domain. The DNA domain has at least one mismatch with
CC   respect to the genetic sequence to be altered and further comprises
CC   chemical modifications of the oligonucleotide. The chemical modifications
CC   consist of o-methyl modification, an LNA modification, two or more
CC   phosphorothioate linkages on a terminus, or a combination of any two or
CC   more of these modifications. The oligonucleotides are useful for
CC   directing repair or alteration of plant genetic information. The
CC   oligonucleotides are particularly useful for creating plants with desired
CC   phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC   nutritional value (e.g. altering amino acid content of plants or
CC   conferring amino acid over production), herbicide resistance (e.g.
CC   glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC   resistance, porphyric herbicide resistance or triazine resistance),
CC   disease resistance, modified oil production, modified starch production
CC   (e.g. increased starch or production of waxy starch), altered floral
CC   morphology (e.g. male-sterile plants) or modified fatty acid content
CC   (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC   The oligonucleotides are also useful for producing albino mutants for the
CC   analysis of photosynthetic processes. This sequence represents a genome
CC   altering oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 8 A; 2 C; 3 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        865 AGGTTATGTTATTC 878
              || ||||||||||||
Db         17 AGTTTATGTTATTC 4


RESULT 197
ABK26180
ID   ABK26180 standard; DNA; 17 BP.
XX
AC   ABK26180;
XX
DT   09-APR-2002  (first entry)
XX
DE   Increased starch production genome altering oligonucleotide #32.
XX
KW   Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW   o-methyl modification; LNA modification; phosphorothioate linkage;
KW   DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW   abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW   amino acid over production; herbicide resistance; glyphosate resistance;
KW   imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW   porphyric herbicide resistance; triazine resistance; disease resistance;
KW   modified oil production; modified starch production; waxy starch;
KW   altered floral morphology; male-sterile plant; albino mutant;
KW   modified fatty acid content; reduced palmitate production; albino plant;
KW   increased stearate production; reduced linolenic acid production;
KW   photosynthetic process.
XX
OS   Arabidopsis thaliana.
OS   Synthetic.
XX
PN   WO200192512-A2.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-US17672.
XX
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
PR   27-MAR-2001; 2001US-0818875.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC,  Kim J;
XX
DR   WPI; 2002-106307/14.
XX
PT   New oligonucleotides with modified nuclease-resistant termini, useful
PT   for creating plants with desired phenotypes, e.g. stress tolerance,
PT   improved nutritional value, herbicide or disease resistance, or
PT   modified oil production  -
XX
PS   Claim 7; Page 136; 220pp; English.
XX
CC   The invention relates to an oligonucleotide for targeted alteration of a
CC   genetic sequence, which comprises a single-stranded oligonucleotide
CC   having a DNA domain. The DNA domain has at least one mismatch with
CC   respect to the genetic sequence to be altered and further comprises
CC   chemical modifications of the oligonucleotide. The chemical modifications
CC   consist of o-methyl modification, an LNA modification, two or more
CC   phosphorothioate linkages on a terminus, or a combination of any two or
CC   more of these modifications. The oligonucleotides are useful for
CC   directing repair or alteration of plant genetic information. The
CC   oligonucleotides are particularly useful for creating plants with desired
CC   phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC   nutritional value (e.g. altering amino acid content of plants or
CC   conferring amino acid over production), herbicide resistance (e.g.
CC   glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC   resistance, porphyric herbicide resistance or triazine resistance),
CC   disease resistance, modified oil production, modified starch production
CC   (e.g. increased starch or production of waxy starch), altered floral
CC   morphology (e.g. male-sterile plants) or modified fatty acid content
CC   (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC   The oligonucleotides are also useful for producing albino mutants for the
CC   analysis of photosynthetic processes. This sequence represents a genome
CC   altering oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 2 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        865 AGGTTATGTTATTC 878
              || ||||||||||||
Db          1 AGTTTATGTTATTC 14


RESULT 198
ABT34446/c
ID   ABT34446 standard; DNA; 17 BP.
XX
AC   ABT34446;
```

```
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 83.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 43; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 7 A; 5 C; 1 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        980 GATGTTGATTTTGA 993
              ||||||||||| ||
Db         16 GATGTTGATTTAGA 3


RESULT 199
ABT35287/c
ID   ABT35287 standard; DNA; 17 BP.
XX
AC   ABT35287;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 924.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 141; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 9 A; 5 C; 1 G; 2 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        983 GTTGATTTTGAGAT 996
              |||| |||||||||
Db         15 GTTGTTTTTGAGAT 2


RESULT 200
ABT36104
ID   ABT36104 standard; DNA; 17 BP.
XX
AC   ABT36104;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 1741.
```

```
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 236; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 2 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        895 TCTACCAAAGTTTA 908
              ||||| ||||||||
Db          3 TCTACTAAAGTTTA 16


RESULT 201
ABZ61087
ID   ABZ61087 standard; RNA; 17 BP.
XX
AC   ABZ61087;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human K-Ras DNAzyme substrate #1199.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US16840.
XX
PR   29-MAY-2001; 2001US-294140P.
PR   06-JUN-2001; 2001US-296249P.
PR   10-SEP-2001; 2001US-318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences  -
XX
PS   Claim S8; Page 108; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and
CC   anti-rheumatic activity. The nucleic acid molecules are useful for
CC   reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 10 A; 0 C; 2 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   64.3%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        933 ATGTACTAAAAATA 946
              |:|:| :|||||:|
Db          4 AUGUAAUAAAAAUA 17


RESULT 202
ABZ64996
ID   ABZ64996 standard; RNA; 17 BP.
XX
AC   ABZ64996;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #453.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US16840.
XX
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```
PR   29-MAY-2001; 2001US-294140P.
PR   06-JUN-2001; 2001US-296249P.
PR   10-SEP-2001; 2001US-318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences  -
XX
PS   Claim 4; Page 141; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and
CC   anti-rheumatic activity. The nucleic acid molecules are useful for
CC   reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 2 A; 4 C; 6 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   64.3%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1009 TGAACAGTGTGTGG 1022
              :|| |||:|:|:||
Db          1 UGACCAGUGUGUGG 14


RESULT 203
ABZ65413
ID   ABZ65413 standard; RNA; 17 BP.
XX
AC   ABZ65413;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #870.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US16840.
XX
PR   29-MAY-2001; 2001US-294140P.
PR   06-JUN-2001; 2001US-296249P.
PR   10-SEP-2001; 2001US-318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences  -
XX
PS   Claim 4; Page 149; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and
CC   anti-rheumatic activity. The nucleic acid molecules are useful for
CC   reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 1 A; 9 C; 2 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   64.3%;  Pred. No. 2.2e+02;
  Matches    9;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        816 CCTGCTGCCTTCAG 829
              ||: |:|||::|||
Db          3 CCUCCUGCCUUCAG 16


RESULT 204
ABK55744/c
ID   ABK55744 standard; RNA; 17 BP.
XX
AC   ABK55744;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human CLCA1 gene enzymatic nucleic acid #115.
XX
KW   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW   antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW   chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW   oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW   acetylcysteine.
XX
OS   Homo sapiens.
XX
PN   WO200211674-A2.
XX
PD   14-FEB-2002.
XX
PF   09-AUG-2001; 2001WO-US24970.
XX
PR   09-AUG-2000; 2000US-224383P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  McSwiggen J,  McKenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
DR   WPI; 2002-217145/27.
XX
PT   Enzymatic polynucleotide that down regulates expression of chloride
PT   channel calcium activated gene, useful for treating Chronic obstructive
PT   pulmonary disease (COPD), chronic bronchitis and asthma  -
XX
PS   Claim 4; Page 55; 152pp; English.
XX
CC   The invention relates to enzymatic nucleic acid molecules that down
CC   regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC   by cleaving RNA derived from the genes. The nucleic acid sequences are
```

CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention.
XX
SQ Sequence 17 BP; 6 A; 2 C; 2 G; 7 U; 0 other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2051 TTTGAAATAAAAAC 2064
||||||||||||| |
Db 17 TTTGAAATAAAATC 4

RESULT 205
ABK55745/c
ID ABK55745 standard; RNA; 17 BP.
XX
AC ABK55745;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human CLCA1 gene enzymatic nucleic acid #116.
XX
KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW acetylcysteine.
XX
OS Homo sapiens.
XX
PN WO200211674-A2.
XX
PD 14-FEB-2002.
XX
PF 09-AUG-2001; 2001WO-US24970.
XX
PR 09-AUG-2000; 2000US-224383P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTEX USA LLC.
PA (THOM/) THOMPSON J.
XX
PI Thompson J, McSwiggen J, McKenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX
DR WPI; 2002-217145/27.
XX
PT Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma -
XX
PS Claim 4; Page 55; 152pp; English.
XX
CC The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention.
XX
SQ Sequence 17 BP; 6 A; 2 C; 2 G; 7 U; 0 other;

Query Match 0.6%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2051 TTTGAAATAAAAAC 2064
||||||||||||| |
Db 16 TTTGAAATAAAATC 3

RESULT 206
AAX71585
ID AAX71585 standard; RNA; 17 BP.
XX
AC AAX71585;
XX
DT 28-JUL-1999 (first entry)
XX
DE Human KDR VEGF receptor hammerhead ribozyme substrate #597.
XX
KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.
XX
OS Homo sapiens.
XX
PN WO9715662-A2.
XX
PD 01-MAY-1997.
XX
PF 25-OCT-1996; 96WO-US17480.
XX
PR 11-JAN-1996; 96US-0584040.
PR 26-OCT-1995; 95US-0005974.
XX
PA (CHIR) CHIRON CORP.
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Escobedo J, McSwiggen J, Pavco P, Stinchcomb D;
XX
DR WPI; 1997-259017/23.
XX
PT Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT mRNA stability - useful for treating e.g. tumour angiogenesis,
PT psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS Claim 4; Page 115; 218pp; English.
XX
CC The present invention describes nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC be treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention.

```
XX
SQ   Sequence 17 BP; 8 A; 2 C; 4 G; 3 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 2.4e+02;
  Matches   11;  Conservative    3;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1079 GATAACTTTGGAATCCA 1095
              || |||:::|||| ||
Db          1 GAAAACUUUGGAAGACA 17


RESULT 207
AAQ72657/c
ID   AAQ72657 standard; DNA; 17 BP.
XX
AC   AAQ72657;
XX
DT   25-MAR-2003  (updated)
DT   22-MAY-1995  (first entry)
XX
DE   Probe S02 for distinguishing HLA-B alleles.
XX
KW   Polymerase chain reaction; PCR; primer; amplify; detection; HLA-B;
KW   human leukocyte antigen; B25P; allele; exon 2; B54(22); B52(5); B7801;
KW   B62(15); B75(15); B71(70); B46; B79; B53; B5102; B5103; B58(17);
KW   compatibility; donor; recipient; organ transplant; success-rate;
KW   bone-marrow transplant; disease susceptibilty study; probe;
KW   forensic investigation; ss.
XX
OS   Synthetic.
XX
PN   WO9421818-A1.
XX
PD   29-SEP-1994.
XX
PF   07-MAR-1994;   94WO-EP00654.
XX
PR   18-MAR-1993;   93EP-0400700.
XX
PA   (INNO-) INNOGENETICS NV SA.
XX
PI   Andrien M,  De Canck I,  Dupont E,  Rossau R;
XX
DR   WPI; 1994-317037/39.
XX
PT   DNA typing using primers and probes enabling discrimination of
PT   HLA-B alleles - esp. where difficult to discriminate by
PT   serological means.
XX
PS   Claim 17; Page 43; 66pp; English.
XX
CC   The sequences given in AAQ72636-55 are probes which were used to
CC   discriminate HLA-B alleles which are characterised by having the
CC   sequence 5'-GCCA-3' at position 30-33 of exon 2 of the HLA-B allele.
CC   Variants of these sequences which may also be used are given in
CC   AAQ72656- 81.  These probes are used to identify the amplification
CC   products of the primers given in AAQ72630-35.  These primers may be used
CC   to distinguish between HLA-B types which are serologically difficult to
CC   discriminate, eg. B54(22), B52(5), B7801, B62(15), B75(15), B71(70), B46,
CC   B79, B53, B5102, B5103 and B58(17).  Using this method, HLA-B
CC   compatibility between donors and recipients of organ transplants can be
CC   increased, thereby having a beneficial impact on success-rate of organ
CC   and bone- marrow transplants.  HLA-B typing may be used to improve or
CC   facilitate disease susceptibilty studies and forensic investigations.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        786 GACCACTAAGATGTAGC 802
              | ||||| ||||| |||
Db         17 GCCCACTGAGATGAAGC 1


RESULT 208
AAT53528/c
ID   AAT53528 standard; RNA; 17 BP.
XX
AC   AAT53528;
XX
DT   25-MAR-2003  (updated)
DT   27-MAR-1997  (first entry)
XX
DE   Rat ICAM hammerhead ribozyme target sequence (nt. position 1503).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome;
KW   AIDS; ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB00156.
XX
PR   30-JAN-1995;   95US-0380734.
PR   23-FEB-1994;   94US-0201109.
PR   29-MAR-1994;   94US-0218934.
PR   04-APR-1994;   94US-0222795.
PR   07-APR-1994;   94US-0224483.
PR   15-APR-1994;   94US-0227958.
PR   15-APR-1994;   94US-0228041.
PR   18-MAY-1994;   94US-0245736.
PR   06-JUL-1994;   94US-0271280.
PR   15-AUG-1994;   94US-0291932.
PR   16-AUG-1994;   94US-0291433.
PR   17-AUG-1994;   94US-0292620.
PR   19-AUG-1994;   94US-0293520.
PR   02-SEP-1994;   94US-0300000.
PR   08-SEP-1994;   94US-0303039.
PR   23-SEP-1994;   94US-0311486.
PR   23-SEP-1994;   94US-0311749.
PR   28-SEP-1994;   94US-0314397.
PR   03-OCT-1994;   94US-0316771.
PR   07-OCT-1994;   94US-0319492.
PR   11-OCT-1994;   94US-0321993.
PR   04-NOV-1994;   94US-0334847.
PR   10-NOV-1994;   94US-0337608.
PR   28-NOV-1994;   94US-0345516.
PR   16-DEC-1994;   94US-0357577.
PR   23-DEC-1994;   94US-0363233.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D;
PI   Thompson JD,  Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them  -
```

PT for use in inhibiting disease related genes
XX
PS Claim 2; Page 202; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for
CC an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1
CC mRNA at the nucleotide base position indicated in the DE line.
CC Regions of the mRNA that do not form secondary folding
CC structures and that contain potential hammerhead and hairpin
CC ribozyme cleavage sites were identified by computer analysis.
CC Ribozymes directed against these mRNA sequences were designed and
CC synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and
CC thereby inhibit ICAM-1 expression, making them useful for reducing
CC transplant rejection and alleviating symptoms in patients with
CC rheumatoid arthritis, asthma and other inflammatory disorders.
CC (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 3 U; 0 other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1019 GTGGTTGGCAAAATTTC 1035
||||||| | | ||||
Db 17 GTGGTTGGAACATTTTC 1

RESULT 209
AAT53446/c
ID AAT53446 standard; RNA; 17 BP.
XX
AC AAT53446;
XX
DT 25-MAR-2003 (updated)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 564).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW human immunodeficiency virus; acquired immune deficiency syndrome;
KW AIDS; ss.
XX
OS Rattus rattus.
XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB00156.
XX
PR 30-JAN-1995; 95US-0380734.
PR 23-FEB-1994; 94US-0201109.
PR 29-MAR-1994; 94US-0218934.
PR 04-APR-1994; 94US-0222795.
PR 07-APR-1994; 94US-0224483.
PR 15-APR-1994; 94US-0227958.
PR 15-APR-1994; 94US-0228041.
PR 18-MAY-1994; 94US-0245736.
PR 06-JUL-1994; 94US-0271280.
PR 15-AUG-1994; 94US-0291932.
PR 16-AUG-1994; 94US-0291433.
PR 17-AUG-1994; 94US-0292620.
PR 19-AUG-1994; 94US-0293520.
PR 02-SEP-1994; 94US-0300000.
PR 08-SEP-1994; 94US-0303039.
PR 23-SEP-1994; 94US-0311486.
PR 23-SEP-1994; 94US-0311749.
PR 28-SEP-1994; 94US-0314397.
PR 03-OCT-1994; 94US-0316771.
PR 07-OCT-1994; 94US-0319492.
PR 11-OCT-1994; 94US-0321993.
PR 04-NOV-1994; 94US-0334847.
PR 10-NOV-1994; 94US-0337608.
PR 28-NOV-1994; 94US-0345516.
PR 16-DEC-1994; 94US-0357577.
PR 23-DEC-1994; 94US-0363233.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D;
PI Thompson JD, Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them -
PT for use in inhibiting disease related genes
XX
PS Claim 2; Page 201; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for
CC an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1
CC mRNA at the nucleotide base position indicated in the DE line.
CC Regions of the mRNA that do not form secondary folding
CC structures and that contain potential hammerhead and hairpin
CC ribozyme cleavage sites were identified by computer analysis.
CC Ribozymes directed against these mRNA sequences were designed and
CC synthesised with modifications that improve their nuclease
CC resistance. The ribozymes cleave the ICAM-1 target sequences and
CC thereby inhibit ICAM-1 expression, making them useful for reducing
CC transplant rejection and alleviating symptoms in patients with
CC rheumatoid arthritis, asthma and other inflammatory disorders.
CC (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 3 U; 0 other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1019 GTGGTTGGCAAAATTTC 1035
||||||| | | ||||
Db 17 GTGGTTGGAACATTTTC 1

RESULT 210
AAT53691/c
ID AAT53691 standard; RNA; 17 BP.
XX
AC AAT53691;
XX
DT 25-MAR-2003 (updated)
DT 27-MAR-1997 (first entry)
XX
DE Rat ICAM hammerhead ribozyme target sequence (nt. position 2176).
XX
KW Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW intercellular adhesion molecule; rel A; tumour necrosis factor;
KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW translocation; chronic myelogenous leukaemia; CML; cancer;
KW Philadelphia chromosome; inflammation; autoimmune disease;
KW atherosclerosis; myocardial infarction; stroke; restenosis;
KW transplant rejection; rheumatoid arthritis; psoriasis;
KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;

```
KW   human immunodeficiency virus; acquired immune deficiency syndrome;
KW   AIDS; ss.
XX
OS   Rattus rattus.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB00156.
XX
PR   30-JAN-1995;   95US-0380734.
PR   23-FEB-1994;   94US-0201109.
PR   29-MAR-1994;   94US-0218934.
PR   04-APR-1994;   94US-0222795.
PR   07-APR-1994;   94US-0224483.
PR   15-APR-1994;   94US-0227958.
PR   15-APR-1994;   94US-0228041.
PR   18-MAY-1994;   94US-0245736.
PR   06-JUL-1994;   94US-0271280.
PR   15-AUG-1994;   94US-0291932.
PR   16-AUG-1994;   94US-0291433.
PR   17-AUG-1994;   94US-0292620.
PR   19-AUG-1994;   94US-0293520.
PR   02-SEP-1994;   94US-0300000.
PR   08-SEP-1994;   94US-0303039.
PR   23-SEP-1994;   94US-0311486.
PR   23-SEP-1994;   94US-0311749.
PR   28-SEP-1994;   94US-0314397.
PR   03-OCT-1994;   94US-0316771.
PR   07-OCT-1994;   94US-0319492.
PR   11-OCT-1994;   94US-0321993.
PR   04-NOV-1994;   94US-0334847.
PR   10-NOV-1994;   94US-0337608.
PR   28-NOV-1994;   94US-0345516.
PR   16-DEC-1994;   94US-0357577.
PR   23-DEC-1994;   94US-0363233.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D;
PI   Thompson JD,  Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them  -
PT   for use in inhibiting disease related genes
XX
PS   Claim 2; Page 203; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for
CC   an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1
CC   mRNA at the nucleotide base position indicated in the DB line.
CC   Regions of the mRNA that do not form secondary folding
CC   structures and that contain potential hammerhead and hairpin
CC   ribozyme cleavage sites were identified by computer analysis.
CC   Ribozymes directed against these mRNA sequences were designed and
CC   synthesised with modifications that improve their nuclease
CC   resistance. The ribozymes cleave the ICAM-1 target sequences and
CC   thereby inhibit ICAM-1 expression, making them useful for reducing
CC   transplant rejection and alleviating symptoms in patients with
CC   rheumatoid arthritis, asthma and other inflammatory disorders.
CC   (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 17 BP; 7 A; 5 C; 2 G; 3 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1019 GTGGTTGGCAAAATTTC 1035
                |||||||| | | ||||
Db         17 GTGGTTGGAACATTTTC 1


RESULT 211
AAT81648
ID   AAT81648 standard; RNA; 17 BP.
XX
AC   AAT81648;
XX
DT   21-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 3240).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer;
KW   c-myb; coronary angioplasty; ss.
XX
OS   Homo sapiens.
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US06368.
XX
PR   13-JAN-1995;   95US-0373124.
PR   18-MAY-1994;   94US-0245466.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Draper K,  Jarvis T,  McSwiggen J,  Stinchcomb DT;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - which cleave RNA produced by
PT   e.g. c-myb, for treating restenosis or cancer
XX
PS   Claim 1; Page 80; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the
CC   descriptor line. The c-myb sequence was screened for optimal ribozyme
CC   target sites using a computer folding algorithm, and regions of the mRNA
CC   which did not form secondary folding structures and contained potential
CC   ribozyme cleavage sites were identified.  Ribozymes were synthesised and
CC   their activities optimised by either varying the length of the binding
CC   arms or by modification to prevent degradation by nucleases.
CC   The ribozymes cleave the c-myb sequence and can be used to prevent
CC   smooth muscle cell hyperproliferation in restenosis, especially after
CC   coronary angioplasty, and in cancers.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 3 G; 6 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   52.9%;  Pred. No. 2.4e+02;
  Matches    9;  Conservative    5;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1046 ACTGGAATTTTGAGAGA 1062
                 ||:| | :::::|||| |
Db          1 ACUGAACUUUUGAGAUA 17


RESULT 212
AAX75391/c
ID   AAX75391 standard; RNA; 17 BP.
XX
AC   AAX75391;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #919.
```

```
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 183; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 3 G; 6 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        998 AAATCTCTTGATGAACA 1014
              || |||||| |||| ||
Db         17 AAGTCTCTTAATGATCA 1


RESULT 213
AAX75191/c
ID   AAX75191 standard; RNA; 17 BP.
XX
AC   AAX75191;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #719.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 176; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 6 A; 3 C; 2 G; 6 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        990 TTGAGATTAAATCTCTT 1006
              ||||||| ||| || ||
Db         17 TTGAGATAAAACCTGTT 1


RESULT 214
AAX73140/c
ID   AAX73140 standard; RNA; 17 BP.
XX
AC   AAX73140;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #573.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
```

```
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 141; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 7 A; 3 C; 4 G; 3 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        894 GTCTACCAAAGTTTACA 910
              |||| ||| ||||| ||
Db         17 GTCTTCCAGAGTTTTCA 1


RESULT 215
AAX73127/c
ID   AAX73127 standard; RNA; 17 BP.
XX
AC   AAX73127;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #560.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 140; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 6 A; 5 C; 2 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        970 CTGTTGTGGAGATGTTG 986
              ||||| |||||||  ||
Db         17 CTGTTCTGGAGATAATG 1


RESULT 216
AAX71488
ID   AAX71488 standard; RNA; 17 BP.
XX
AC   AAX71488;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human KDR VEGF receptor hammerhead ribozyme substrate #500.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 112; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 7 A; 2 C; 3 G; 5 U; 0 other;
```

```
  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 2.4e+02;
  Matches   11;  Conservative    3;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        653 AACAGCTTTGGACAGAG 669
              ||||  ::: |||||||
Db          1 AACAAUUUUUGACAGAG 17


RESULT 217
AAX69266/c
ID   AAX69266 standard; RNA; 17 BP.
XX
AC   AAX69266;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Human flt1 VEGF receptor hammerhead ribozyme substrate #561.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Homo sapiens.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 63; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 8 A; 6 C; 1 G; 2 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        976 TGGAGATGTTGATTTTG 992
              ||| | ||| |||||||
Db         17 TGGTGCTGTAGATTTTG 1


RESULT 218
AAV97373/c
ID   AAV97373 standard; RNA; 17 BP.
XX
AC   AAV97373;
XX
DT   17-MAR-1999  (first entry)
XX
DE   Human EGF-R target sequence nucleotide position 1328.
XX
KW   Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence;
KW   hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation;
KW   cancer; genetic drift; detection; mutation; ss.
XX
OS   Homo sapiens.
XX
PN   WO9833893-A2.
XX
PD   06-AUG-1998.
XX
PF   14-JAN-1998;   98WO-US00730.
XX
PR   04-DEC-1997;   97US-0985162.
PR   31-JAN-1997;   97US-0036476.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (UYAS-) UNIV ASTON.
XX
PI   Akhtar S,  Fell P,  McSwiggen JA;
XX
DR   WPI; 1998-437449/37.
XX
PT   Enzymatic nucleic acids - which cleave RNA derived from an epidermal
PT   growth factor receptor, useful for inhibiting cell proliferation and
PT   for treating cancers
XX
PS   Claim 5; Page 71; 109pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules (NAMs)
CC   which specifically cleave RNA derived from an epidermal growth factor
CC   receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090
CC   represent specifically claimed target sequence from human EGF-R. AAV98044
CC   to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and
CC   hairpin ribozymes respectively for human EGF-R. The NAMs are useful for
CC   cleaving EGF-R RNA in the treatment of a condition associated with EGFR
CC   expression levels e.g. to inhibit cell proliferation in the prevention or
CC   treatment of cancers. The NAMs can also be used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of EGF-R RNA in a cell.
XX
SQ   Sequence 17 BP; 5 A; 6 C; 1 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        757 TATGGGTCAAGAAGTCA 773
              |||| || ||| |||||
Db         17 TATGTGTGAAGGAGTCA 1


RESULT 219
AAV30347/c
ID   AAV30347 standard; DNA; 17 BP.
XX
AC   AAV30347;
XX
DT   29-SEP-1998  (first entry)
XX
DE   Oligomer p17rpst used in construction of recombinant HBsAg/ayw.
XX
KW   Hepatitis B virus; surface antigen; yeast; PHO5; promoter; vaccine; ss.
XX
OS   Synthetic.
OS   Hepatitis B virus.
```

```
XX
PN   RU2088664-C1.
XX
PD   27-AUG-1997.
XX
PF   26-JAN-1996;   96RU-0101565.
XX
PR   26-JAN-1996;   96RU-0101565.
XX
PA   (KOMB=) KOMBIOTEKH STOCK CO.
XX
PI   Borisova VN,  Budanov MV,  Drutsa VL;
XX
DR   WPI; 1998-191876/17.
XX
PT   New recombinant plasmid DNA pDES 20 coding for HBsAg-ayw  - and new
PT   Saccharomyces cerevisiae yeast strain containing it, for producing
PT   non-toxic, highly immunogenic hepatitis B vaccines
XX
PS   Disclosure; Column 7; 11pp; Russian.
XX
CC   The oligonucleotides AAV30347-V30394 were used in the construction of
CC   a recombinant hepatitis B virus surface antigen ayw coding sequence
CC   (AAV23279). The recombinant sequence was cloned into the plasmid pDES20
CC   under control of a modified yeast PHO5 gene promoter (AAV23280) and the
CC   PHO5 terminator sequence (AAV23281).  The recombinant plasmid also
CC   contains a ColE1 bacterial replication origin; a bacterial beta-lactamase
CC   gene; the natural yeast 2-micron plasmid fragment allowing autonomous
CC   replication of pDES20 in yeast; a yeast Leu2 gene and the recombinant
CC   HbsAg/ayw gene.  The plasmid is used to generate the yeast strain
CC   DAN-041/pDES20 for expressing the antigen.  The antigen can then be
CC   used to generate an anti-hepatitis virus vaccine.
XX
SQ   Sequence 17 BP; 7 A; 5 C; 4 G; 1 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        807 GTTGTTGTCCCTGCTGC 823
              ||||||| |  ||||||
Db         17 GTTGTTGCCATTGCTGC 1


RESULT 220
AAA23134/c
ID   AAA23134 standard; RNA; 17 BP.
XX
AC   AAA23134;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Integrin subunit beta 3 substrate sequence SEQ ID NO:6360.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US06507.
XX
PR   27-MAR-1998;   98US-0079678.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  McSwiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or
PT   stability of an mRNA encoding an angiogenic factors  -
XX
PS   Claim 54; Page 264; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with
CC   RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ   Sequence 17 BP; 2 A; 6 C; 1 G; 8 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        917 AATGAGAAAAGAGAGGA 933
              |||||| |||  |||||
Db         17 AATGAGGAAACTGAGGA 1


RESULT 221
AAA23135/c
ID   AAA23135 standard; RNA; 17 BP.
XX
AC   AAA23135;
XX
DT   19-JUN-2000  (first entry)
XX
DE   Integrin subunit beta 3 substrate sequence SEQ ID NO:6361.
XX
KW   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW   integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW   hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW   ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW   dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW   age related macular degeneration; inflammation; neovascular glaucoma;
KW   myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW   tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW   Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   WO9950403-A2.
XX
```

```
PD   07-OCT-1999.
XX
PF   24-MAR-1999;   99WO-US06507.
XX
PR   27-MAR-1998;   98US-0079678.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Pavco PA,  Roberts E,  Jarvis T,  Coeshott C,  McSwiggen JA;
XX
DR   WPI; 1999-591315/50.
XX
PT   Novel ribozymes for modulating the synthesis, expression and/or
PT   stability of an mRNA encoding an angiogenic factors  -
XX
PS   Claim 54; Page 264; 305pp; English.
XX
CC   The present invention describes enzymatic nucleic acid molecules with
CC   RNA cleaving activity, which specifically cleave RNA encoded by an aryl
CC   hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC   gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC   AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC   and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC   corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC   AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC   and AAA19155 to AAA19222 represent their corresponding target sequences;
CC   AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC   sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC   AAA21596 to AAA21688 represent their corresponding target sequences;
CC   AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3.
XX
SQ   Sequence 17 BP; 2 A; 6 C; 1 G; 8 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        916 AAATGAGAAAAGAGAGG 932
              ||||||| |||  ||||
Db         17 AAATGAGGAAACTGAGG 1


RESULT 222
AAV93558/c
ID   AAV93558 standard; RNA; 17 BP.
XX
AC   AAV93558;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human B-raf substrate nucleotide position 1679.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene;
KW   delivery; screening; identification; synthesis; deprotection;
KW   purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW   infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US09249.
XX
PR   19-DEC-1997;   97US-0068212.
PR   09-MAY-1997;   97US-0046059.
PR   09-JUN-1997;   97US-0049002.
PR   03-JUL-1997;   97US-0051718.
PR   22-AUG-1997;   97US-0056808.
PR   02-OCT-1997;   97US-0061321.
PR   02-OCT-1997;   97US-0061324.
PR   05-NOV-1997;   97US-0064866.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Beaudry A,  Beigelman L,  Bellon L,  Burgin A,  Jarvis T;
PI   Karpeisky A,  Kisich K,  Matulic-Adamic J,  McSwiggen JA;
PI   Parry T,  Reynolds M,  Sweedler D,  Thompson J,  Workman CT;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected
PT   processes - especially ribozymes that cleave Raf RNA for treating
PT   cancer, restenosis, and also new ribozymes and modified nucleoside
PT   triphosphates used as antiviral agents and synthons
XX
PS   Claim 177; Page 170; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
CC   acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC   a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC   in systems where modulation has occurred and/or determining the sequence
CC   of at least part of the SBDs in such systems. Nucleic acid molecules
CC   with endonuclease activity and catalytic activity, from the present
CC   invention, are used to modulate gene expression in plant and mammalian
CC   cells and to cleave target nucleic acid, particularly for treating
CC   systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC   psoriasis, non-hepatic ascites and infection. They may also be used to
CC   detect genetic drift and mutations in diseased cells and to determine
CC   c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC   expression of the Raf gene, are used to treat cancer, restenosis,
CC   psoriasis or rheumatoid arthritis, or generally any condition associated
CC   with the level of c-raf. Introduction of sugar/phosphate modifications
CC   increases stability against nuclease and activity. AAV90922 to AAV93877
CC   represent NACs that can be used in the method, specifically for
CC   modulating the expression of a Raf gene.
XX
SQ   Sequence 17 BP; 5 A; 7 C; 0 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        972 GTTGTGGAGATGTTGAT 988
              | | |||||||| ||||
Db         17 GATATGGAGATGGTGAT 1


RESULT 223
AAV91167
ID   AAV91167 standard; RNA; 17 BP.
XX
AC   AAV91167;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human C-raf target site nucleotide position 1589.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene;
```

```
KW   delivery; screening; identification; synthesis; deprotection;
KW   purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW   infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US09249.
XX
PR   19-DEC-1997;   97US-0068212.
PR   09-MAY-1997;   97US-0046059.
PR   09-JUN-1997;   97US-0049002.
PR   03-JUL-1997;   97US-0051718.
PR   22-AUG-1997;   97US-0056808.
PR   02-OCT-1997;   97US-0061321.
PR   02-OCT-1997;   97US-0061324.
PR   05-NOV-1997;   97US-0064866.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Beaudry A,  Beigelman L,  Bellon L,  Burgin A,  Jarvis T;
PI   Karpeisky A,  Kisich K,  Matulic-Adamic J,  McSwiggen JA;
PI   Parry T,  Reynolds M,  Sweedler D,  Thompson J,  Workman CT;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected
PT   processes - especially ribozymes that cleave Raf RNA for treating
PT   cancer, restenosis, and also new ribozymes and modified nucleoside
PT   triphosphates used as antiviral agents and synthons
XX
PS   Claim 177; Page 150; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
CC   acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC   a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC   in systems where modulation has occurred and/or determining the sequence
CC   of at least part of the SBDs in such systems. Nucleic acid molecules
CC   with endonuclease activity and catalytic activity, from the present
CC   invention, are used to modulate gene expression in plant and mammalian
CC   cells and to cleave target nucleic acid, particularly for treating
CC   systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC   psoriasis, non-hepatic ascites and infection. They may also be used to
CC   detect genetic drift and mutations in diseased cells and to determine
CC   c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC   expression of the Raf gene, are used to treat cancer, restenosis,
CC   psoriasis or rheumatoid arthritis, or generally any condition associated
CC   with the level of c-raf. Introduction of sugar/phosphate modifications
CC   increases stability against nuclease and activity. AAV90922 to AAV93877
CC   represent NACs that can be used in the method, specifically for
CC   modulating the expression of a Raf gene.
XX
SQ   Sequence 17 BP; 2 A; 0 C; 7 G; 8 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   41.2%;  Pred. No. 2.4e+02;
  Matches    7;  Conservative    7;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        976 TGGAGATGTTGATTTTG 992
              :|||||: ::| ::: |
Db          1 UGGAGAUUUUGGUUUGG 17


RESULT 224
AAF01982
ID   AAF01982 standard; DNA; 17 BP.
XX
AC   AAF01982;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #277.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 62; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        966 GCAGCTGTTGTGGAGAT 982
              ||| |||||||| | ||
Db          1 GCACCTGTTGTGCAAAT 17


RESULT 225
AAF02395/c
ID   AAF02395 standard; DNA; 17 BP.
XX
AC   AAF02395;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #690.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
```

```
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 71; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 3 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        654 ACAGCTTTGGACAGAGG 670
              ||||||||| ||| | |
Db         17 ACAGCTTTGAACAAATG 1


RESULT 226
AAF03398
ID   AAF03398 standard; DNA; 17 BP.
XX
AC   AAF03398;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1693.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 94; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 8 A; 3 C; 2 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        905 TTTACAATTCAAAATGA 921
              || ||||| || |||||
Db          1 TTCACAATACAGAATGA 17


RESULT 227
ABK02373/c
ID   ABK02373 standard; RNA; 17 BP.
XX
AC   ABK02373;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Amberzyme #45.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 88; Page 131; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
```

```
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is an amberzyme molecule of the invention.
XX
SQ   Sequence 17 BP; 5 A; 3 C; 7 G; 2 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        844 AGCTCCTCCTGGTGTAC 860
              |||||||| ||| | |
Db         17 AGCTCCTCCAGGTCTTC 1


RESULT 228
ABK02475
ID   ABK02475 standard; RNA; 17 BP.
XX
AC   ABK02475;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Amberzyme #147.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US04273.
XX
PR   11-FEB-2000; 2000US-181797P.
PR   28-FEB-2000; 2000US-185516P.
PR   06-MAR-2000; 2000US-187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  McSwiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT   and central nervous system injury  -
XX
PS   Claim 88; Page 133; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO).
CC   The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC   motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC   (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC   to cleave RNA of CD20 in the presence of a divalent cation that is
CC   preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC   CD20 activity of the cell and treat a patient having a condition
CC   associated with the level of CD20. The treatment may further comprise the
CC   use of one or more therapies. In particular, the CD20 targetting
CC   nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC   lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC   low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC   immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC   immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC   thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC   nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC   divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC   may be contacted with a cell to reduce NOGO activity of the cell and
CC   treat a patient having a condition associated with the level of NOGO. The
CC   treatment may further comprise the use of one or more therapies.
CC   In particular, the NOGO-targetting nucleic acid may be used to treat
CC   central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC   stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The
CC   present sequence is an amberzyme molecule of the invention.
XX
SQ   Sequence 17 BP; 3 A; 4 C; 5 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.4e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        678 TTGCAGCGGAAGATACT 694
              ::|||| ||||| : |:
Db          1 UUGCAGUGGAAGCUCCU 17


RESULT 229
ABV80679/c
ID   ABV80679 standard; DNA; 17 BP.
XX
AC   ABV80679;
XX
DT   03-JAN-2003  (first entry)
XX
DE   Human HTPL scanning oligonucleotide SEQ ID 1925.
XX
KW   Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW   human testis expressed Patched like protein; testis; adrenal; liver;
KW   male germ cell development; bone marrow; brain; kidney; lung; placenta;
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KW   prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   EP1229046-A2.
XX
PD   07-AUG-2002.
XX
PF   28-JAN-2002; 2002EP-0001167.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   23-MAY-2001; 2001US-0864761.
PR   09-OCT-2001; 2001US-0327898.
XX
PA   (ABOM-) AEOMICA INC.
XX
PI   Zhan J;
XX
DR   WPI; 2002-676582/73.
XX
PT   Novel isolated human testis expressed Patched like protein (HTPL),
PT   useful for identifying agonist and antagonist and specific binding
PT   partners, and for treating subjects having defects in HTPL -
XX
PS   Example 2; Page 316; 718pp; English.
XX
CC   The present invention relates to human testis expressed Patched like
CC   protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC   has two isoforms, with a few single base pair differences between the
CC   two. One of the single base pair changes introduces a premature stop
CC   codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC   shares an overall structure organisation with the Patched protein. The
CC   shared structural features strongly imply that HTPL plays a role similar
CC   to that of Patched, and is a potential tumour suppressor. HTPL is
CC   important in regulating male germ cell development, and the HTPL gene was
CC   mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC   useful for diagnosing a disorder caused by mutation in HTPL, and in
CC   therapy and manufacture of a medicament for treatment or prevention of
CC   such disorder associated with decreased expression or activity of human
CC   HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC   foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC   skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC   clinically useful diagnostic markers and potenial therapeutic agents for
CC   male infertility and cancer. The present oligonucleotide was used in an
CC   example from the invention.
XX
SQ   Sequence 17 BP; 4 A; 2 C; 2 G; 9 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        930 AGGATGTACTAAAAATA 946
              | |||||||| ||| |||
Db         17 ATGATGTACAAAACATA 1


RESULT 230
ABS74966
ID   ABS74966 standard; DNA; 17 BP.
XX
AC   ABS74966;
XX
DT   24-DEC-2002  (first entry)
XX
DE   Human PAPP-Ea associated 17-mer SEQ ID 492.
XX
KW   PAPP-E; human; pregnancy associated plasma protein E; abortive;
KW   contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
KW   dysgenetic pregnancy; primer; ss.
XX
OS   Homo sapiens.
XX
PN   US2002102252-A1.
XX
PD   01-AUG-2002.
XX
PF   06-APR-2001; 2001US-0827998.
XX
PR   26-MAY-2000; 2000US-207456P.
XX
PA   (GUYY/) GU Y.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Shannon ME;
XX
DR   WPI; 2002-697817/75.
XX
PT   New isolated nucleic acid encoding an isoform of human pregnancy
PT   associated plasma protein E, for preventing or aborting pregnancy -
XX
PS   Example 2; Page 140; 353pp; English.
XX
CC   This invention describes a novel isolated nucleic acid that encodes
CC   one of three new isoforms of human pregnancy associated plasma protein E,
CC   hPAPP-E. The products of the invention have abortive and contraceptive
CC   activity and can be used for gene therapy or in a vaccine. The nucleic
CC   acid, polypeptide encoded by it, or antibody to the polypeptide can be
CC   used in pharmaceutical compositions or vaccines for preventing or
CC   aborting pregnancy. PAPP-E is used in the antenatal diagnosis of
CC   dysgenetic pregnancies. The nucleic acids are used as probes to assess
CC   the level of PAPP-E isoform mRNA in chorionic villus samples, and the
CC   antibodies can be used to assess the expression levels of PAPP-E isoform
CC   proteins in chorionic villus samples, to diagnose dysgenetic pregnancies
CC   antenatally. This sequence represents an oligomer used in scanning the
CC   human PAPP-E genes described in the disclosure of the invention.
XX
SQ   Sequence 17 BP; 8 A; 2 C; 4 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        831 AGATAGAAATCCAAGCT 847
              ||| |||||||  ||||
Db          1 AGAAAGAAATCTGAGCT 17


RESULT 231
ABV89526
ID   ABV89526 standard; DNA; 17 BP.
XX
AC   ABV89526;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 239.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
```

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PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 239; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 6 A; 1 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1044 GGACTGGAATTTTGAGA 1060
              | |||||| |||||| |
Db          1 GAACTGGAGTTTTGAAA 17


RESULT 232
ABV89528
ID   ABV89528 standard; DNA; 17 BP.
XX
AC   ABV89528;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 241.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 241; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 6 A; 1 C; 4 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1046 ACTGGAATTTTGAGAGA 1062
              |||||| |||||| | |
Db          1 ACTGGAGTTTTGAAATA 17


RESULT 233
ABV89900/c
ID   ABV89900 standard; DNA; 17 BP.
XX
AC   ABV89900;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 613.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
```

```
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 613; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        982 TGTTGATTTTGAGATTA 998
              ||| |||| ||| ||||
Db         17 TGTGGATTCTGACATTA 1


RESULT 234
ABV89901/c
ID   ABV89901 standard; DNA; 17 BP.
XX
AC   ABV89901;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 614.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 614; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        981 ATGTTGATTTTGAGATT 997
              |||| |||| ||| |||
Db         17 ATGTGGATTCTGACATT 1


RESULT 235
ABK55743/c
ID   ABK55743 standard; RNA; 17 BP.
XX
AC   ABK55743;
XX
DT   02-JUL-2002  (first entry)
```

```
XX
DE   Human CLCA1 gene enzymatic nucleic acid #114.
XX
KW   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW   antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW   chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW   oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW   acetylcysteine.
XX
OS   Homo sapiens.
XX
PN   WO200211674-A2.
XX
PD   14-FEB-2002.
XX
PF   09-AUG-2001; 2001WO-US24970.
XX
PR   09-AUG-2000; 2000US-224383P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  McSwiggen J,  McKenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
DR   WPI; 2002-217145/27.
XX
PT   Enzymatic polynucleotide that down regulates expression of chloride
PT   channel calcium activated gene, useful for treating Chronic obstructive
PT   pulmonary disease (COPD), chronic bronchitis and asthma  -
XX
PS   Claim 4; Page 55; 152pp; English.
XX
CC   The invention relates to enzymatic nucleic acid molecules that down
CC   regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC   by cleaving RNA derived from the genes. The nucleic acid sequences are
CC   useful as pharmaceutical agents for treating conditions such as chronic
CC   obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC   fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC   that are related to or will respond to the levels of CLCA1 in a cell or
CC   tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC   hence, are useful for treatment of a patient having a condition
CC   associated with the level of CLCA1, where the invention further comprises
CC   the use of one or more therapies under conditions suitable for the
CC   treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC   antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC   nucleic acids of the invention are also used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of CLCA1 RNA in a cell. This sequence represents an
CC   enzymatic nucleic acid molecule of the invention.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 2 G; 7 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        990 TTGAGATTAAATCTCTT 1006
              |||| || ||||| |||
Db         17 TTGAAATAAAATCGCTT 1

RESULT 236
ABK56206/c
ID   ABK56206 standard; RNA; 17 BP.
XX
AC   ABK56206;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human CLCA1 gene enzymatic nucleic acid #577.
XX
KW   Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW   antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW   chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW   oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW   acetylcysteine.
XX
OS   Homo sapiens.
XX
PN   WO200211674-A2.
XX
PD   14-FEB-2002.
XX
PF   09-AUG-2001; 2001WO-US24970.
XX
PR   09-AUG-2000; 2000US-224383P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (SYNT ) SYNTEX USA LLC.
PA   (THOM/) THOMPSON J.
XX
PI   Thompson J,  McSwiggen J,  McKenzie T,  Ayers D,  Szymkowski DE;
PI   Grupe A;
XX
DR   WPI; 2002-217145/27.
XX
PT   Enzymatic polynucleotide that down regulates expression of chloride
PT   channel calcium activated gene, useful for treating Chronic obstructive
PT   pulmonary disease (COPD), chronic bronchitis and asthma  -
XX
PS   Claim 4; Page 64; 152pp; English.
XX
CC   The invention relates to enzymatic nucleic acid molecules that down
CC   regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC   by cleaving RNA derived from the genes. The nucleic acid sequences are
CC   useful as pharmaceutical agents for treating conditions such as chronic
CC   obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC   fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC   that are related to or will respond to the levels of CLCA1 in a cell or
CC   tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC   hence, are useful for treatment of a patient having a condition
CC   associated with the level of CLCA1, where the invention further comprises
CC   the use of one or more therapies under conditions suitable for the
CC   treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC   antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC   nucleic acids of the invention are also used as diagnostic tools to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of CLCA1 RNA in a cell. This sequence represents an
CC   enzymatic nucleic acid molecule of the invention.
XX
SQ   Sequence 17 BP; 5 A; 1 C; 5 G; 6 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        887 CACCCATGTCTACCAAA 903
              || |||| | |||||||
Db         17 CATCCATTTGTACCAAA 1

RESULT 237
ABN02298/c
ID   ABN02298 standard; DNA; 17 BP.
XX
AC   ABN02298;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2290.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
```

```
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 2290; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        715 CTGTGGGCCATCTAGAC 731
              ||||||||||  | ||
Db         17 CTGTGGGCCATGGACAC 1
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RESULT 238
ABN02299/c
ID   ABN02299 standard; DNA; 17 BP.
XX
AC   ABN02299;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2291.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 2291; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
```

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CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        714 GCTGTGGGCCATCTAGA 730
              |||||||||||| | |
Db         17 GCTGTGGGCCATGGACA 1


RESULT 239
ABN07200
ID   ABN07200 standard; DNA; 17 BP.
XX
AC   ABN07200;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7192.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 7192; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 2 A; 6 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        726 CTAGACCTTTTACCTTG 742
              || |||||  | ||||||
Db          1 CTTGACCTCTGACCTTG 17


RESULT 240
ABN10062/c
ID   ABN10062 standard; DNA; 17 BP.
XX
AC   ABN10062;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10054.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
```

```
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 10054; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1033 TTCCAAGCACTGGACTG 1049
              ||||||| ||||||  |
Db         17 TTCCAAGGTCTGGACAG 1


RESULT 241
ABK17639/c
ID   ABK17639 standard; RNA; 17 BP.
XX
AC   ABK17639;
XX
DT   09-APR-2002  (first entry)
XX
DE   Human ERG hammerhead ribozyme target sequence, Seq ID No 286.
XX
KW   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW   ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW   vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW   tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW   neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW   angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW   Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW   Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW   amberzyme.
XX
OS   Homo sapiens.
XX
PN   WO200188124-A2.
XX
PD   22-NOV-2001.
XX
PF   16-MAY-2001; 2001WO-US15866.
XX
PR   16-MAY-2000; 2000US-0572021.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Jarvis T,  Von Carlowitz I,  McSwiggen JA,  Mclaughlin F,  Randi AM;
XX
DR   WPI; 2002-082995/11.
XX
PT   Novel polynucleotide which down regulates expression of Ets-related
PT   gene, useful for treating cancer, diabetic retinopathy, macular
PT   degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber
PT   syndrome  -
XX
PS   Claim 4; Page 64; 149pp; English.
XX
CC   The invention relates to a nucleic acid molecule (I) which down regulates
CC   expression of an Ets-related gene (ERG). (I) is useful for treating
CC   conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC   tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC   neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC   vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC   Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC   syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC   treating a patient having a condition associated with the level of ERG,
CC   by contacting cells of the patient with (I) under conditions suitable for
CC   the treatment. The method comprises the use of one or more therapies
CC   under conditions suitable for the treatment. Leukaemia or tumour
CC   angiogenesis is treated by administering (I) to the patient in
CC   conjunction with one or more of other therapies such as radiation or
CC   chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC   cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC   ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC   cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC   diseases related to the expression of ERG, and as diagnostic tool to
CC   examine genetic drift and mutations within diseased cells or to detect
CC   the presence of ERG RNA in a cell. (I) is useful for specifically
CC   targeting genes that share homology with ERG gene or ERG fusion genes.
CC   ABK17354-ABK22719 represent nucleic acids, including antisense and
CC   enzymatic nucleic acid molecules which regulate expression of ERG, and
CC   related PCR primers of the invention.
XX
SQ   Sequence 17 BP; 9 A; 3 C; 0 G; 5 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        984 TTGATTTTGAGATTAAA 1000
              ||| |||||| || |||
Db         17 TTGTTTTTGATATGAAA 1


RESULT 242
ABL31434/c
ID   ABL31434 standard; DNA; 17 BP.
XX
AC   ABL31434;
XX
DT   21-MAR-2002  (first entry)
XX
DE   Human HLA genotyping oligonucleotide SEQ ID NO 923.
XX
KW   Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW   immunogenetic; transplantation; genetic disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192572-A1.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-JP04662.
XX
PR   01-JUN-2000; 2000JP-0164798.
XX
PA   (NISN ) NISSHINBO IND INC.
PA   (SYST-) SYSTEM RES INC.
XX
```

PI Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
XX
DR WPI; 2002-122074/16.
XX
PT Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes
PT of individuals e.g. by determining immunogenetic differences when
PT transplanting between them -
XX
PS Claim 10; Page 268; 345pp; Japanese.
XX
CC The invention relates to a typing kit for judging human leukocyte antigen
CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC genes e.g. belonging to HLA class I antigens on human genome and
CC containing gene polymorphisms as alloantigens have been immobilised as
CC primers for amplification of cleaved nucleic acids relating to gene
CC polymorphisms. The method is useful for judging HLA genotypes of
CC individuals by determining immunogenetic differences before transplanting
CC between them, providing genetic information to decide compatibility of
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC diagnosis of genetic diseases and identifying individuals.
XX
SQ Sequence 17 BP; 2 A; 5 C; 4 G; 6 T; 0 other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 785 AGACCACTAAGATGTAG 801
|| ||||| ||||| ||
Db 17 AGCCCACTGAGATGAAG 1

RESULT 243
ABT36249
ID ABT36249 standard; DNA; 17 BP.
XX
AC ABT36249;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 1886.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB04208.
XX
PR 17-SEP-2001; 2001FR-0011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases
PT associated with tumors and cell degeneration, also related
PT polypeptides, antibodies and transfected cells -
XX
PS Disclosure; Page 253; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15
CC consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC sequence that hybridizes to them under highly stringent conditions, or
CC the complement of any of them, or the corresponding RNA. The novel
CC isolated nucleic acids of the invention are useful as probes and primers
CC for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC and for production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention.
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 3 T; 0 other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 761 GGTCAAGAAGTCATAAC 777
| || |||| |||||||
Db 1 GATCCAGAACTCATAAC 17

RESULT 244
ABT39265
ID ABT39265 standard; DNA; 17 BP.
XX
AC ABT39265;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 4902.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB04208.
XX
PR 17-SEP-2001; 2001FR-0011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases
PT associated with tumors and cell degeneration, also related
PT polypeptides, antibodies and transfected cells -
XX
PS Disclosure; Page 607; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15
CC consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC optimal alignment, at least 80 % identity to the 17 mer sequence, a

CC sequence that hybridizes to them under highly stringent conditions, or
CC the complement of any of them, or the corresponding RNA. The novel
CC isolated nucleic acids of the invention are useful as probes and primers
CC for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC and for production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention.
XX
SQ Sequence 17 BP; 5 A; 7 C; 2 G; 3 T; 0 other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 832 GATAGAAATCCAAGCTC 848
||| |||||| |||||
Db 1 GATCCAAATCCCAGCTC 17

RESULT 245
ABT39393/c
ID ABT39393 standard; DNA; 17 BP.
XX
AC ABT39393;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 5030.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB04208.
XX
PR 17-SEP-2001; 2001FR-0011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases
PT associated with tumors and cell degeneration, also related
PT polypeptides, antibodies and transfected cells -
XX
PS Disclosure; Page 622; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15
CC consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC sequence that hybridizes to them under highly stringent conditions, or
CC the complement of any of them, or the corresponding RNA. The novel
CC isolated nucleic acids of the invention are useful as probes and primers
CC for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC and for production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 6 T; 0 other;

Query Match 0.6%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 773 ATAACTCTGGAGAGACC 789
||| ||||| ||||| |
Db 17 ATACCTCTGAAGAGATC 1

RESULT 246
ABZ61846
ID ABZ61846 standard; RNA; 17 BP.
XX
AC ABZ61846;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNAzyme target #637.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US16840.
XX
PR 29-MAY-2001; 2001US-294140P.
PR 06-JUN-2001; 2001US-296249P.
PR 10-SEP-2001; 2001US-318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences -
XX
PS Claim 58; Page 123; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and
CC anti-rheumatic activity. The nucleic acid molecules are useful for
CC reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic

```
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 5 A; 3 C; 5 G; 4 U; 0 other;

  Query Match             0.6%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   58.8%;  Pred. No. 2.4e+02;
  Matches   10;  Conservative    4;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        663 GACAGAGGGTTTACTTT 679
              ||||||| | ::||: :
Db          1 GACAGAGAGCUUACUGU 17


RESULT 247
ABH72675/c
ID   ABH72675 standard; DNA; 12 BP.
XX
AC   ABH72675;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 272660 for detecting SNP TSC0002893.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 272660; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 1 A; 2 C; 0 G; 9 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        915 AAAATGAGAAAA 926
              ||||||||||||
Db         12 AAAATGAGAAAA 1


RESULT 248
ABH77043
ID   ABH77043 standard; DNA; 12 BP.
XX
AC   ABH77043;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 277036 for detecting SNP TSC0004364.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 277036; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 1 A; 0 C; 5 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        955 ATGTGTTGTGTG 966
              ||||||||||||
Db          1 ATGTGTTGTGTG 12


RESULT 249
ABH80023/c
ID   ABH80023 standard; DNA; 12 BP.
XX
AC   ABH80023;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 280016 for detecting SNP TSC0008045.
```

```
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 280016; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 1 C; 1 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        935 GTACTAAAAATA 946
              ||||||||||||
Db         12 GTACTAAAAATA 1


RESULT 250
ABH83219
ID   ABH83219 standard; DNA; 12 BP.
XX
AC   ABH83219;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 283212 for detecting SNP TSC0011204.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 283212; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 5 A; 0 C; 1 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAAT 757
              ||||||||||||
Db          1 ATTATTGATAAT 12


RESULT 251
ABH84861
ID   ABH84861 standard; DNA; 12 BP.
XX
AC   ABH84861;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 284854 for detecting SNP TSC0012029.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 284854; 29pp + Sequence Listing; German.
```

```
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        984 TTGATTTTGAGA 995
              ||||||||||||
Db          1 TTGATTTTGAGA 12


RESULT 252
ABI03168/c
ID   ABI03168 standard; DNA; 12 BP.
XX
AC   ABI03168;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 303141 for detecting SNP TSC0020339.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 303141; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        863 ATAGGTTATGTT 874
              ||||||||||||
Db         12 ATAGGTTATGTT 1


RESULT 253
ABI06313
ID   ABI06313 standard; DNA; 12 BP.
XX
AC   ABI06313;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 306286 for detecting SNP TSC0021923.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 306286; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 4 A; 0 C; 2 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        987 ATTTTGAGATTA 998
              ||||||||||||
Db          1 ATTTTGAGATTA 12


RESULT 254
```

```
ABI15694/c
ID   ABI15694 standard; DNA; 12 BP.
XX
AC   ABI15694;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 315667 for detecting SNP TSC0027027.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 315667; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 4 A; 3 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1051 AATTTTGAGAGA 1062
             ||||||||||||
Db         12 AATTTTGAGAGA 1


RESULT 255
ABI18418
ID   ABI18418 standard; DNA; 12 BP.
XX
AC   ABI18418;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 318391 for detecting SNP TSC0028630.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 318391; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        982 TGTTGATTTTGA 993
              ||||||||||||
Db          1 TGTTGATTTTGA 12


RESULT 256
ABI19228/c
ID   ABI19228 standard; DNA; 12 BP.
XX
AC   ABI19228;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 319201 for detecting SNP TSC0029114.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
```

```
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 319201; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        984 TTGATTTTGAGA 995
              ||||||||||||
Db         12 TTGATTTTGAGA 1


RESULT 257
ABI19662
ID   ABI19662 standard; DNA; 12 BP.
XX
AC   ABI19662;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 319635 for detecting SNP TSC0029334.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 319635; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 8 A; 1 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        936 TACTAAAAATAA 947
              ||||||||||||
Db          1 TACTAAAAATAA 12


RESULT 258
ABI24889/c
ID   ABI24889 standard; DNA; 12 BP.
XX
AC   ABI24889;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 324862 for detecting SNP TSC0032268.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 324862; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 5 A; 2 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
```

```
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        745 GATTATTGATAA 756
              ||||||||||||
Db         12 GATTATTGATAA 1


RESULT 259
ABI27970/c
ID   ABI27970 standard; DNA; 12 BP.
XX
AC   ABI27970;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 327943 for detecting SNP TSC0033989.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 327943; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 0 C; 2 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        908 ACAATTCAAAAT 919
              ||||||||||||
Db         12 ACAATTCAAAAT 1


RESULT 260
ABI30130
ID   ABI30130 standard; DNA; 12 BP.
XX
AC   ABI30130;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 330103 for detecting SNP TSC0035341.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 330103; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 2 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        983 GTTGATTTTGAG 994
              ||||||||||||
Db          1 GTTGATTTTGAG 12


RESULT 261
ABI34101
ID   ABI34101 standard; DNA; 12 BP.
XX
AC   ABI34101;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 334074 for detecting SNP TSC0037931.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
```

```
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 334074; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 7 A; 2 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        907 TACAATTCAAAA 918
              ||||||||||||
Db          1 TACAATTCAAAA 12


RESULT 262
ABI43327
ID   ABI43327 standard; DNA; 12 BP.
XX
AC   ABI43327;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 343300 for detecting SNP TSC0042988.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 343300; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        985 TGATTTTGAGAT 996
              ||||||||||||
Db          1 TGATTTTGAGAT 12


RESULT 263
ABI54168
ID   ABI54168 standard; DNA; 12 BP.
XX
AC   ABI54168;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 354141 for detecting SNP TSC0048928.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 354141; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
```

```
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 2 A; 0 C; 3 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATT 877
              ||||||||||||
Db          1 GGTTATGTTATT 12


RESULT 264
ABI61742
ID   ABI61742 standard; DNA; 12 BP.
XX
AC   ABI61742;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 361715 for detecting SNP TSC0052786.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 361715; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 7 A; 0 C; 4 G; 1 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        828 AGGAGATAGAAA 839
              ||||||||||||
Db          1 AGGAGATAGAAA 12


RESULT 265
ABI72654
ID   ABI72654 standard; DNA; 12 BP.
XX
AC   ABI72654;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 372627 for detecting SNP TSC0059505.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 372627; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 6 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1027 CAAAATTTCCAA 1038
              ||||||||||||
Db          1 CAAAATTTCCAA 12


RESULT 266
ABI81677/c
ID   ABI81677 standard; DNA; 12 BP.
XX
AC   ABI81677;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 381650 for detecting SNP TSC0004677.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

```
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 381650; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 7 A; 3 C; 0 G; 2 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATT 877
              ||||||||||||
Db         12 GGTTATGTTATT 1


RESULT 267
ABC04190
ID   ABC04190 standard; DNA; 13 BP.
XX
AC   ABC04190;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 4181 for detecting SNP TSC0001555.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 4181; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        748 TATTGATAATAT 759
              ||||||||||||
Db          1 TATTGATAATAT 12


RESULT 268
ABC04191/c
ID   ABC04191 standard; DNA; 13 BP.
XX
AC   ABC04191;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 4182 for detecting SNP TSC0001555.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 4182; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
```

```
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        748 TATTGATAATAT 759
              ||||||||||||
Db         13 TATTGATAATAT 2


RESULT 269
ABC59578
ID   ABC59578 standard; DNA; 13 BP.
XX
AC   ABC59578;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 59595 for detecting SNP TSC0015959.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 59595; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1051 AATTTTGAGAGA 1062
              ||||||||||||
Db          2 AATTTTGAGAGA 13


RESULT 270
ABC59579/c
ID   ABC59579 standard; DNA; 13 BP.
XX
AC   ABC59579;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 59596 for detecting SNP TSC0015959.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 59596; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1051 AATTTTGAGAGA 1062
              ||||||||||||
Db         12 AATTTTGAGAGA 1


RESULT 271
ABC64758
ID   ABC64758 standard; DNA; 13 BP.
```

XX
AC ABC64758;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 64775 for detecting SNP TSC0017077.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 64775; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 0 C; 3 G; 6 T; 1 other;

Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 740 TTGAGGATTATT 751
||||||||||||
Db 1 TTGAGGATTATT 12

RESULT 272
ABC64759/c
ID ABC64759 standard; DNA; 13 BP.
XX
AC ABC64759;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 64776 for detecting SNP TSC0017077.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 64776; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 6 A; 3 C; 0 G; 3 T; 1 other;

Query Match 0.6%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 740 TTGAGGATTATT 751
||||||||||||
Db 13 TTGAGGATTATT 2

RESULT 273
ABC67092
ID ABC67092 standard; DNA; 13 BP.
XX
AC ABC67092;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 67109 for detecting SNP TSC0017577.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.

```
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 67109; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAAT 757
              ||||||||||||
Db          1 ATTATTGATAAT 12


RESULT 274
ABC67093/c
ID   ABC67093 standard; DNA; 13 BP.
XX
AC   ABC67093;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 67110 for detecting SNP TSC0017577.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 67110; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAAT 757
              ||||||||||||
Db         13 ATTATTGATAAT 2


RESULT 275
ABC68824
ID   ABC68824 standard; DNA; 13 BP.
XX
AC   ABC68824;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 68841 for detecting SNP TSC0017930.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 68841; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 4 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy        866 GGTTATGTTATT 877
              ||||||||||||
Db          1 GGTTATGTTATT 12


RESULT 276
ABC68825/c
ID   ABC68825 standard; DNA; 13 BP.
XX
AC   ABC68825;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 68842 for detecting SNP TSC0017930.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 68842; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 4 C; 0 G; 2 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATT 877
              ||||||||||||
Db         13 GGTTATGTTATT 2


RESULT 277
ABC82886/c
ID   ABC82886 standard; DNA; 13 BP.
XX
AC   ABC82886;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 82903 for detecting SNP TSC0020897.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 82903; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        908 ACAATTCAAAAT 919
              ||||||||||||
Db         13 ACAATTCAAAAT 2


RESULT 278
ABC82887
ID   ABC82887 standard; DNA; 13 BP.
XX
AC   ABC82887;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 82904 for detecting SNP TSC0020897.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
```

```
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 82904; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        908 ACAATTCAAAAT 919
              ||||||||||||
Db          1 ACAATTCAAAAT 12


RESULT 279
ABF10676
ID   ABF10676 standard; DNA; 13 BP.
XX
AC   ABF10676;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 110673 for detecting SNP TSC0027619.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 110673; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 1 G; 6 T; 1 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAAT 757
              ||||||||||||
Db          1 ATTATTGATAAT 12


RESULT 280
ABF10677/c
ID   ABF10677 standard; DNA; 13 BP.
XX
AC   ABF10677;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 110674 for detecting SNP TSC0027619.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 110674; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
```

```
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 1 C; 0 G; 5 T; 1 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAAT 757
              ||||||||||||
Db         13 ATTATTGATAAT 2


RESULT 281
ABF16574/c
ID   ABF16574 standard; DNA; 13 BP.
XX
AC   ABF16574;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 116571 for detecting SNP TSC0029176.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 116571; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        936 TACTAAAAATAA 947
              ||||||||||||
Db         13 TACTAAAAATAA 2


RESULT 282
ABF16575
ID   ABF16575 standard; DNA; 13 BP.
XX
AC   ABF16575;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 116572 for detecting SNP TSC0029176.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 116572; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        936 TACTAAAAATAA 947
              ||||||||||||
Db          1 TACTAAAAATAA 12


RESULT 283
ABF40132
ID   ABF40132 standard; DNA; 13 BP.
XX
AC   ABF40132;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 140129 for detecting SNP TSC0035104.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
```

```
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 140129; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 0 C; 4 G; 1 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        923 AAAAGAGAGGAT 934
              ||||||||||||
Db          1 AAAAGAGAGGAT 12


RESULT 284
ABF40133/c
ID   ABF40133 standard; DNA; 13 BP.
XX
AC   ABF40133;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 140130 for detecting SNP TSC0035104.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 140130; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 4 C; 0 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        923 AAAAGAGAGGAT 934
              ||||||||||||
Db         13 AAAAGAGAGGAT 2


RESULT 285
ABF55396
ID   ABF55396 standard; DNA; 13 BP.
XX
AC   ABF55396;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 155393 for detecting SNP TSC0039241.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 155393; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
```

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CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        972 GTTGTGGAGATG 983
              ||||||||||||
Db          1 GTTGTGGAGATG 12


RESULT 286
ABF55397/c
ID   ABF55397 standard; DNA; 13 BP.
XX
AC   ABF55397;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 155394 for detecting SNP TSC0039241.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 155394; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        972 GTTGTGGAGATG 983
              ||||||||||||
Db         13 GTTGTGGAGATG 2


RESULT 287
ABF80938/c
ID   ABF80938 standard; DNA; 13 BP.
XX
AC   ABF80938;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 180935 for detecting SNP TSC0044773.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 180935; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1027 CAAAATTTCCAA 1038
              ||||||||||||
Db         13 CAAAATTTCCAA 2


RESULT 288
ABF80939
ID   ABF80939 standard; DNA; 13 BP.
XX
AC   ABF80939;
```

```
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 180936 for detecting SNP TSC0044773.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 180936; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1027 CAAAATTTCCAA 1038
              ||||||||||||
Db          1 CAAAATTTCCAA 12


RESULT 289
ABH09848/c
ID   ABH09848 standard; DNA; 13 BP.
XX
AC   ABH09848;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 209825 for detecting SNP TSC0009890.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 209825; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        906 TTACAATTCAAA 917
              ||||||||||||
Db         13 TTACAATTCAAA 2


RESULT 290
ABH09849
ID   ABH09849 standard; DNA; 13 BP.
XX
AC   ABH09849;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 209826 for detecting SNP TSC0009890.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
```

```
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 209826; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        906 TTACAATTCAAA 917
              ||||||||||||
Db          1 TTACAATTCAAA 12


RESULT 291
ABH54608
ID   ABH54608 standard; DNA; 13 BP.
XX
AC   ABH54608;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 254585 for detecting SNP TSC0062066.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 254585; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        985 TGATTTTGAGAT 996
              ||||||||||||
Db          1 TGATTTTGAGAT 12


RESULT 292
ABH54609/c
ID   ABH54609 standard; DNA; 13 BP.
XX
AC   ABH54609;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 254586 for detecting SNP TSC0062066.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 254586; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        985 TGATTTTGAGAT 996
              ||||||||||||
```

```
Db         13 TGATTTTGAGAT 2


RESULT 293
ABH57770
ID   ABH57770 standard; DNA; 13 BP.
XX
AC   ABH57770;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 257747 for detecting SNP TSC0009732.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 257747; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        863 ATAGGTTATGTT 874
              ||||||||||||
Db          2 ATAGGTTATGTT 13


RESULT 294
ABH57771/c
ID   ABH57771 standard; DNA; 13 BP.
XX
AC   ABH57771;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 257748 for detecting SNP TSC0009732.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 257748; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        863 ATAGGTTATGTT 874
              ||||||||||||
Db         12 ATAGGTTATGTT 1


RESULT 295
ABH59494
ID   ABH59494 standard; DNA; 13 BP.
XX
AC   ABH59494;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 259471 for detecting SNP TSC0063021.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
```

```
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 259471; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 5 T; 1 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        743 AGGATTATTGAT 754
              ||||||||||||
Db          1 AGGATTATTGAT 12


RESULT 296
ABH59495/c
ID   ABH59495 standard; DNA; 13 BP.
XX
AC   ABH59495;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 259472 for detecting SNP TSC0063021.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 259472; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 3 C; 0 G; 4 T; 1 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        743 AGGATTATTGAT 754
              ||||||||||||
Db         13 AGGATTATTGAT 2


RESULT 297
ABH61350
ID   ABH61350 standard; DNA; 13 BP.
XX
AC   ABH61350;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 261327 for detecting SNP TSC0063441.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
P    WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 261327; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
```

```
SQ   Sequence 13 BP; 9 A; 0 C; 3 G; 1 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        915 AAAATGAGAAAA 926
              ||||||||||||
Db          2 AAAATGAGAAAA 13


RESULT 298
ABH61351/c
ID   ABH61351 standard; DNA; 13 BP.
XX
AC   ABH61351;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 261328 for detecting SNP TSC0063441.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 261328; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 3 C; 0 G; 9 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        915 AAAATGAGAAAA 926
              ||||||||||||
Db         12 AAAATGAGAAAA 1


RESULT 299
ABH63162
ID   ABH63162 standard; DNA; 13 BP.
XX
AC   ABH63162;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 263139 for detecting SNP TSC0063825.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 263139; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1052 ATTTTGAGAGAG 1063
              ||||||||||||
Db          2 ATTTTGAGAGAG 13


RESULT 300
ABH63163/c
ID   ABH63163 standard; DNA; 13 BP.
XX
AC   ABH63163;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 263140 for detecting SNP TSC0063825.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
```

```
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 263140; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1052 ATTTTGAGAGAG 1063
              ||||||||||||
Db         12 ATTTTGAGAGAG 1


RESULT 301
ABH63288
ID   ABH63288 standard; DNA; 13 BP.
XX
AC   ABH63288;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 263265 for detecting SNP TSC0009840.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 263265; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 3 G; 8 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATT 877
              ||||||||||||
Db          2 GGTTATGTTATT 13


RESULT 302
ABH63289/c
ID   ABH63289 standard; DNA; 13 BP.
XX
AC   ABH63289;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 263266 for detecting SNP TSC0009840.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 263266; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
```

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CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 3 C; 0 G; 2 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        866 GGTTATGTTATT 877
              ||||||||||||
Db         12 GGTTATGTTATT 1


RESULT 303
AAH74113
ID   AAH74113 standard; DNA; 14 BP.
XX
AC   AAH74113;
XX
DT   17-DEC-2001  (first entry)
XX
DE   Primer #10 used in identification of gene transcripts.
XX
KW   Primer; DGE; differential gene expression; gene identification; ss.
XX
OS   Unidentified.
XX
PN   EP1113382-A1.
XX
PD   04-JUL-2001.
XX
PF   27-DEC-1999;   99EP-0126017.
XX
PR   27-DEC-1999;   99EP-0126017.
XX
PA   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI   Colinge J,  Feger G;
XX
DR   WPI; 2001-443815/48.
XX
PT   Identifying gene transcripts, involves generating first set of raw
PT   sequences by sequencing biological material, isolating first ditags and
PT   first tags, determining abundance of first tags, reducing sequencing
PT   errors  -
XX
PS   Disclosure; Fig 11; 104pp; English.
XX
CC   The invention relates to a method of identifying gene transcripts,
CC   which involves generating at least a first set of raw sequences (RS) by
CC   sequencing at least a first type of biological material, isolating first
CC   ditags (DT) from RS, isolating first tags (T1) from DT, determining the
CC   abundance of T1 and identifying T1, and then reducing the amount of
CC   sequencing errors using a statistical model for sequencing errors to be
CC   applied to T1. The method is useful for the identification of gene
CC   transcripts such as RNA or their corresponding cDNAs, and also for
CC   collecting information from several cell types, e.g. with reference to
CC   DGE (differential gene expression) studies. The method has improved
CC   efficiency in the treatment of errors, greatly reduces the error rate of
CC   the tags by estimating the error rate and consequently rejecting
CC   dangerous tags. It provides an easy way for consulting the identified
CC   tags by use of an improved graphical interface. Sequencing error is
CC   reduced by applying a statistical model. A measure of correctness of
CC   identification is provided, by allowing the user to confirm the
CC   identification through use of more than one database. The method provides
CC   not only a text form which is richer than other interfaces for similar
CC   data in terms of information about identified tags, but also an improved
CC   graphical interface which allows an easy interpretation of the results
CC   and an easy access to e.g. the KEGG (undefined) pathway. The
CC   present sequence represents primer #10 used in the method of the
CC   invention.
XX
SQ   Sequence 14 BP; 8 A; 2 C; 1 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        933 ATGTACTAAAAA 944
              ||||||||||||
Db          2 ATGTACTAAAAA 13


RESULT 304
AAH74111
ID   AAH74111 standard; DNA; 15 BP.
XX
AC   AAH74111;
XX
DT   17-DEC-2001  (first entry)
XX
DE   Primer #8 used in identification of gene transcripts.
XX
KW   Primer; DGE; differential gene expression; gene identification; ss.
XX
OS   Unidentified.
XX
PN   EP1113382-A1.
XX
PD   04-JUL-2001.
XX
PF   27-DEC-1999;   99EP-0126017.
XX
PR   27-DEC-1999;   99EP-0126017.
XX
PA   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI   Colinge J,  Feger G;
XX
DR   WPI; 2001-443815/48.
XX
PT   Identifying gene transcripts, involves generating first set of raw
PT   sequences by sequencing biological material, isolating first ditags and
PT   first tags, determining abundance of first tags, reducing sequencing
PT   errors  -
XX
PS   Disclosure; Fig 10; 104pp; English.
XX
CC   The invention relates to a method of identifying gene transcripts,
CC   which involves generating at least a first set of raw sequences (RS) by
CC   sequencing at least a first type of biological material, isolating first
CC   ditags (DT) from RS, isolating first tags (T1) from DT, determining the
CC   abundance of T1 and identifying T1, and then reducing the amount of
CC   sequencing errors using a statistical model for sequencing errors to be
CC   applied to T1. The method is useful for the identification of gene
CC   transcripts such as RNA or their corresponding cDNAs, and also for
CC   collecting information from several cell types, e.g. with reference to
CC   DGE (differential gene expression) studies. The method has improved
CC   efficiency in the treatment of errors, greatly reduces the error rate of
CC   the tags by estimating the error rate and consequently rejecting
CC   dangerous tags. It provides an easy way for consulting the identified
CC   tags by use of an improved graphical interface. Sequencing error is
CC   reduced by applying a statistical model. A measure of correctness of
CC   identification is provided, by allowing the user to confirm the
CC   identification through use of more than one database. The method provides
CC   not only a text form which is richer than other interfaces for similar
CC   data in terms of information about identified tags, but also an improved
CC   graphical interface which allows an easy interpretation of the results
CC   and an easy access to e.g. the KEGG (undefined) pathway. The
CC   present sequence represents primer #8 used in the method of the
```

```
CC   invention.
XX
SQ   Sequence 15 BP; 8 A; 2 C; 2 G; 3 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        933 ATGTACTAAAAA 944
              ||||||||||||
Db          2 ATGTACTAAAAA 13


RESULT 305
AAF98066
ID   AAF98066 standard; DNA; 15 BP.
XX
AC   AAF98066;
XX
DT   19-JUN-2001  (first entry)
XX
DE   Human IGERA allele specific oligonucleotide probe SEQ ID NO:105.
XX
KW   Human; polymorphism; immunoglobulin E receptor I alpha subunit; IGERA;
KW   single nucleotide polymorphism; SNP; allele specific oligonucleotide;
KW   immunoassay; detection; PCR primer; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200111010-A2.
XX
PD   15-FEB-2001.
XX
PF   02-AUG-2000; 2000WO-US21097.
XX
PR   09-AUG-1999;   99US-0147860.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Duda A,  Kliem SE,  Lanz EM,  Nandabalan K;
PI   Stephens JC;
XX
DR   WPI; 2001-202766/20.
XX
PT   New polynucleotide for gene therapy, comprises nucleotide polymorphisms
PT   in the immunoglobulin E receptor I alpha subunit gene  -
XX
PS   Claim 15; Page 23; 99pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I) comprising
CC   a nucleotide sequence (S) which is a polymorphic variant of a reference
CC   sequence for the human immunoglobulin E receptor I alpha subunit (IGERA)
CC   gene or its fragment. The polymorphic variant comprises at least one
CC   polymorphism selected from guanine (G) at polymorphic site (PS) 1, PS9,
CC   PS10 or PS21, cytosine (C) at PS2, PS3, PS6, PS12, PS18 or PS20, adenine
CC   (A) at PS5, PS7, PS11, PS13, PS14, PS15, PS19, or PS22 and thymine (T)
CC   at PS4, PS8, PS16 or PS17, or (G) at a position corresponding to
CC   nucleotide 251, (A) at a position corresponding to nucleotide 302 or
CC   741, and (T) at a position corresponding to nucleotide 530. (I) can be
CC   used in gene therapy. (I) is useful for therapeutic purposes. A
CC   polypeptide (II) encoded by (I) is useful in drug screening assays and
CC   in assays to measure the binding affinity of one or more candidate drugs
CC   targeting (II). An antibody (III) to (II) is useful to immunoprecipitate
CC   (II) from solution and also reacts with (II) on Western or immunoblots
CC   of polyacrylamide gels on membrane supports or substrates. (III) is also
CC   useful in immunoassays to detect (II) in biological samples. AAF97965 to
CC   AAF98096 represent IGERA allele specific oligonucleotide probes; AAF98097
CC   to AAF98140 represent IGERA gene polymorphism detection primers; and
CC   AAF98141 to AAF98180 represent IGERA gene PCR primers which are used in
CC   the exemplification of the present invention.
XX
SQ   Sequence 15 BP; 8 A; 2 C; 5 G; 0 U; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        920 GAGAAAAGAGAG 931
              ||||||||||||
Db          2 GAGAAAAGAGAG 13


RESULT 306
AAF98068
ID   AAF98068 standard; DNA; 15 BP.
XX
AC   AAF98068;
XX
DT   19-JUN-2001  (first entry)
XX
DE   Human IGERA allele specific oligonucleotide probe SEQ ID NO:107.
XX
KW   Human; polymorphism; immunoglobulin E receptor I alpha subunit; IGERA;
KW   single nucleotide polymorphism; SNP; allele specific oligonucleotide;
KW   immunoassay; detection; PCR primer; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200111010-A2.
XX
PD   15-FEB-2001.
XX
PF   02-AUG-2000; 2000WO-US21097.
XX
PR   09-AUG-1999;   99US-0147860.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Duda A,  Kliem SE,  Lanz EM,  Nandabalan K;
PI   Stephens JC;
XX
DR   WPI; 2001-202766/20.
XX
PT   New polynucleotide for gene therapy, comprises nucleotide polymorphisms
PT   in the immunoglobulin E receptor I alpha subunit gene  -
XX
PS   Claim 15; Page 23; 99pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I) comprising
CC   a nucleotide sequence (S) which is a polymorphic variant of a reference
CC   sequence for the human immunoglobulin E receptor I alpha subunit (IGERA)
CC   gene or its fragment. The polymorphic variant comprises at least one
CC   polymorphism selected from guanine (G) at polymorphic site (PS) 1, PS9,
CC   PS10 or PS21, cytosine (C) at PS2, PS3, PS6, PS12, PS18 or PS20, adenine
CC   (A) at PS5, PS7, PS11, PS13, PS14, PS15, PS19, or PS22 and thymine (T)
CC   at PS4, PS8, PS16 or PS17, or (G) at a position corresponding to
CC   nucleotide 251, (A) at a position corresponding to nucleotide 302 or
CC   741, and (T) at a position corresponding to nucleotide 530. (I) can be
CC   used in gene therapy. (I) is useful for therapeutic purposes. A
CC   polypeptide (II) encoded by (I) is useful in drug screening assays and
CC   in assays to measure the binding affinity of one or more candidate drugs
CC   targeting (II). An antibody (III) to (II) is useful to immunoprecipitate
CC   (II) from solution and also reacts with (II) on Western or immunoblots
CC   of polyacrylamide gels on membrane supports or substrates. (III) is also
CC   useful in immunoassays to detect (II) in biological samples. AAF97965 to
CC   AAF98096 represent IGERA allele specific oligonucleotide probes; AAF98097
CC   to AAF98140 represent IGERA gene polymorphism detection primers; and
CC   AAF98141 to AAF98180 represent IGERA gene PCR primers which are used in
CC   the exemplification of the present invention.
XX
SQ   Sequence 15 BP; 8 A; 1 C; 5 G; 1 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy        920 GAGAAAAGAGAG 931
              ||||||||||||
Db          2 GAGAAAAGAGAG 13


RESULT 307
ABN80593/c
ID   ABN80593 standard; DNA; 15 BP.
XX
AC   ABN80593;
XX
DT   19-JUL-2002  (first entry)
XX
DE   Human P450(cytochrome) oxidoreductase allele specific PCR primer #33.
XX
KW   Human; P450(cytochrome) oxidoreductase; POR; cancer; haplotype; SNP;
KW   single nucleotide polymorphism; flavoprotein; enzyme; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200226768-A2.
XX
PD   04-APR-2002.
XX
PF   01-OCT-2001; 2001WO-US30877.
XX
PR   29-SEP-2000; 2000US-236449P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kazemi A,  Kliem SE,  Lanz EM,  Messer C,  Tanguay DA;
XX
DR   WPI; 2002-394236/42.
XX
PT   New genetic variants comprising haplotypes of the P450 (cytochrome)
PT   oxidoreductase (POR) isogene, useful in improving the efficiency of
PT   drug screening protocols for compounds targeting POR  -
XX
PS   Claim 14; Page 15; 141pp; English.
XX
CC   The present invention provides the protein, gene and cDNA sequences of
CC   human P450(cytochrome) oxidoreductase POR, and single nucleotide
CC   polymorphisms (SNPs) identified therein. The sequences can be used to
CC   haplotype the POR gene of an individual, and to establish whether POR is
CC   a suitable target for drugs to treat cancer and disorders associated with
CC   impaired protein synthesis in cells. The present sequence is an allele
CC   specific primer for the coding sequences of the invention.
XX
SQ   Sequence 15 BP; 3 A; 8 C; 2 G; 1 T; 1 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1015 GTGTGTGGTTGGCA 1028
              |:|||||| |||||
Db         15 GYGTGTGGCTGGCA 2


RESULT 308
ABK55517
ID   ABK55517 standard; DNA; 15 BP.
XX
AC   ABK55517;
XX
DT   18-JUN-2002  (first entry)
XX
DE   Selectin L Lymphocyte Adhesion Molecule 1 (SELL) oligonucleotide #53.
XX
KW   Human; Selectin L Lymphocyte Adhesion Molecule 1; SELL;
KW   neonatal pertussis; whooping cough; haplotyping; primer;
KW   allele-specific oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
PN   WO200216654-A1.
XX
PD   28-FEB-2002.
XX
PF   27-AUG-2001; 2001WO-US26675.
XX
PR   25-AUG-2000; 2000US-228262P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Bieglecki KM,  Kliem SE,  Koshy B,  Kumar AM;
XX
DR   WPI; 2002-292071/33.
XX
PT   Novel genetic variants of selectin L lymphocyte adhesion molecule 1
PT   (SELL) gene useful for therapeutic purposes and for expressing SELL
PT   protein useful in identifying drugs to treat whooping cough  -
XX
PS   Claim 17; Page 14; 137pp; English.
XX
CC   The invention relates to an isolated polynucleotide (I) comprising a
CC   nucleotide sequence which is a polymorphic variant of a reference
CC   sequence for Selectin L Lymphocyte Adhesion Molecule 1 (SELL) gene.
CC   SELL polypeptide is useful for screening for drugs targeting the
CC   polypeptide. Oligonucleotides derived from (I) are used to target SELL
CC   and a haplotype or haplotype pair of SELL gene. These are useful in
CC   developing diagnostic tests and therapeutic treatments for neonatal
CC   pertussis (whooping cough). (I) is useful for studying the expression and
CC   function of SELL and expressing SELL protein for use in screening for
CC   candidate drugs to treat diseases related to SELL activity. The
CC   polymorphism and haplotype data are useful for validating whether SELL is
CC   a suitable target for drugs to treat whooping cough, screening for such
CC   drugs and reducing bias in clinical trials of such drugs. Establishing
CC   the SELL haplotype or haplotype pair of an individual is useful for
CC   improving the efficiency and reliability of several steps in the
CC   discovery and development of drugs for treating diseases associated with
CC   SELL activity e.g. neonatal pertussis (whooping cough). The haplotyping
CC   method is useful to validate SELL as a candidate target for treating a
CC   specific condition or disease predicted to be associated with SELL
CC   activity. The method is also useful in screening for compounds
CC   targeting SELL to treat a specific condition or disease predicted to be
CC   associated with SELL activity, e.g. detecting which of the SELL
CC   haplotypes or haplotype pairs present in individual members of a
CC   population with the specific disease of interest enables one to screen
CC   for compounds that display the highest desired agonist or antagonist
CC   activity for each of the most frequent SELL isoforms present in the
CC   disease population. A polymorphic variant of SELL is useful in studying
CC   the effect of the variation on the biological activity of SELL, on the
CC   binding affinity of candidate drugs targeting SELL for the treatment of
CC   neonatal pertussis (whooping cough) and in assays to measure the
CC   binding affinities of one or more candidate drugs targeting the SELL
CC   protein. ABK55465-ABK55559 represent SELL gene allele-specific
CC   oligonucleotides of the invention.
XX
SQ   Sequence 15 BP; 4 A; 2 C; 3 G; 5 T; 1 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        754 TAATATGGGTCA 765
              ||||||||||||
Db          1 TAATATGGGTCA 12


RESULT 309
AAD31906
ID   AAD31906 standard; DNA; 16 BP.
XX
AC   AAD31906;
XX
```

```
DT   18-JUN-2002  (first entry)
XX
DE   Borrelia burgdorferi alpha synuclein DNA #2.
XX
KW   Microbial virulence factor; genetic predisposition; Alzheimer's disease;
KW   Parkinson's disease; schizophrenia; frontotemporal lobe dementia;
KW   hereditary multi-infarct dementia; primary X-linked mental retardation;
KW   dementia; myopathy; familial British dementia; psychiatric disorder;
KW   transgenic animal; alpha synuclein; ds.
XX
OS   Borrelia burgdorferi.
XX
PN   WO200214546-A1.
XX
PD   21-FEB-2002.
XX
PF   15-FEB-2001; 2001WO-IB00189.
XX
PR   16-AUG-2000; 2000WO-IB01127.
XX
PA   (FRIT/) FRITZSCHE M.
XX
PI   Fritzsche M; .
XX
DR   WPI; 2002-241910/29.
XX
PT   Use of DNA sequence having fragment of nucleic acid encoding putative
PT   microbial virulence factor useful for identification of disease e.g.
PT   Alzheimer's disease, caused by mutations or for genetic predisposition
PT   -
XX
PS   Claim 6; Page 23; 52pp; English.
XX
CC   The present invention relates to the use of a DNA sequence comprising a
CC   fragment of a nucleic acid encoding a putative microbial virulence factor
CC   for the identification of a disease caused by mutations or for a genetic
CC   predisposition. The invention also relates to a method for identification
CC   of a disease which comprises detecting the presence of a mutation within
CC   a nucleic acid sequence of the fragment of virulence factor in a tissue-
CC   or blood sample of a subject, where the tissue sample is a foetal graft
CC   for neurotransplantation and where the sequence is inserted in the 3'
CC   UTR (untranslated region) of the gene and mutation is found in the
CC   polyadenylation signal of G1. The method is useful for identification
CC   of a disease caused by mutation or for their genetic predisposition
CC   where the disease is human disease which is from Alzheimer's disease,
CC   Parkinson's disease, schizophrenia, myopathy, other forms of dementias
CC   (frontotemporal lobe dementia, autosomal dominant Parkinson Lewy-Body
CC   dementia, hereditary multi-infarct dementia, familial British dementia,
CC   primary X-linked mental retardation) and where the human disease
CC   constitutes a predisposition or a genetic variation, the pathological
CC   manifestation of which is triggered by medicaments or drugs which is
CC   preferably cannabis, where the manifestation comprises any forms of
CC   dementia, schizophrenia or related psychiatric disorders. The invention
CC   also relates to transgenic animals (e.g. comprising a non-functional
CC   endogenous cannabinoid receptor (CB1) gene) which are useful for the
CC   identifying or screening of compounds that have an effect on the
CC   activity, expression or regulation of the translated protein (e.g.
CC   CB1 protein). The present sequence is a DNA encoding Borrelia burgdorferi
CC   alpha synuclein protein, a virulence factor protein. This sequence is
CC   used in the exemplification of the invention.
XX
SQ   Sequence 16 BP; 10 A; 1 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 2.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        936 TACTAAAAATAA 947
              ||||||||||||
Db          1 TACTAAAAATAA 12


RESULT 310
AAX75298/c
ID   AAX75298 standard; RNA; 17 BP.
XX
AC   AAX75298;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #826.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 180; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 7 G; 2 U; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        889 CCCATGTCTACC 900
              ||||||||||||
Db         17 CCCATGTCTACC 6


RESULT 311
ABN02300/c
ID   ABN02300 standard; DNA; 17 BP.
XX
AC   ABN02300;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2292.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
```

```
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 2292; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        714 GCTGTGGGCCAT 725
              ||||||||||||
Db         16 GCTGTGGGCCAT 5
```

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RESULT 312
ABN02301/c
ID   ABN02301 standard; DNA; 17 BP.
XX
AC   ABN02301;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2293.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 2293; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
```

CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 714 GCTGTGGGCCAT 725
||||||||||||
Db 15 GCTGTGGGCCAT 4

RESULT 313
ABN02302/c
ID ABN02302 standard; DNA; 17 BP.
XX
AC ABN02302;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2294.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US16981.
XX
PR 26-MAY-2000; 2000US-207456P.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
PR 30-JAN-2001; 2001WO-US00661.
PR 30-JAN-2001; 2001WO-US00662.
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 05-FEB-2001; 2001US-266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1
PT proteins, or as specific biomolecule capture probes for
PT surface-enhanced laser desorption ionization, comprises human
PT myosin-like protein hGDMLP-1 -
XX
PS Disclosure; SEQ ID 2294; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC hGDMLP-1 can be used in gene therapy and vaccine production. The
CC hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC substrates, to provide initial substrates for the recombinant engineering
CC of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC be used as immunogens to raise antibodies that specifically recognise
CC hGDMLP-1 proteins, as standards in assays used to determine the
CC concentration and/or amount specifically of hGDMLP proteins, as specific
CC biomolecule capture probes for surface-enhanced laser desorption
CC ionisation, as therapeutic supplement in patients having specific
CC deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC diagnosing a disorder associated with the expression of hGDMLP-1, in
CC particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC chromosome 22. The present sequence represents an oligomer used in the
CC screening of the hGDMLP-1 sequence in the exemplification of the present
CC invention.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ Sequence 17 BP; 3 A; 9 C; 4 G; 1 T; 0 other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 714 GCTGTGGGCCAT 725
||||||||||||
Db 14 GCTGTGGGCCAT 3

RESULT 314
ABN02303/c
ID ABN02303 standard; DNA; 17 BP.
XX
AC ABN02303;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2295.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US16981.
XX
PR 26-MAY-2000; 2000US-207456P.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
PR 30-JAN-2001; 2001WO-US00661.
PR 30-JAN-2001; 2001WO-US00662.
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 05-FEB-2001; 2001US-266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1
PT proteins, or as specific biomolecule capture probes for

PT surface-enhanced laser desorption ionization, comprises human
PT myosin-like protein hGDMLP-1 -
XX
PS Disclosure; SEQ ID 2295; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC hGDMLP-1 can be used in gene therapy and vaccine production. The
CC hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC substrates, to provide initial substrates for the recombinant engineering
CC of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC be used as immunogens to raise antibodies that specifically recognise
CC hGDMLP-1 proteins, as standards in assays used to determine the
CC concentration and/or amount specifically of hGDMLP proteins, as specific
CC biomolecule capture probes for surface-enhanced laser desorption
CC ionisation, as therapeutic supplement in patients having specific
CC deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC diagnosing a disorder associated with the expression of hGDMLP-1, in
CC particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC chromosome 22. The present sequence represents an oligomer used in the
CC screening of the hGDMLP-1 sequence in the exemplification of the present
CC invention.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ Sequence 17 BP; 4 A; 8 C; 4 G; 1 T; 0 other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 714 GCTGTGGGCCAT 725
||||||||||||
Db 13 GCTGTGGGCCAT 2

RESULT 315
ABN02304/c
ID ABN02304 standard; DNA; 17 BP.
XX
AC ABN02304;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2296.
XX
KW Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US16981.
XX
PR 26-MAY-2000; 2000US-207456P.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-236359P.
PR 04-OCT-2000; 2000GB-0024263.
PR 30-JAN-2001; 2001WO-US00661.
PR 30-JAN-2001; 2001WO-US00662.
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 05-FEB-2001; 2001US-266860P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMLP-1
PT proteins, or as specific biomolecule capture probes for
PT surface-enhanced laser desorption ionization, comprises human
PT myosin-like protein hGDMLP-1 -
XX
PS Disclosure; SEQ ID 2296; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC hGDMLP-1 can be used in gene therapy and vaccine production. The
CC hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC substrates, to provide initial substrates for the recombinant engineering
CC of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC be used as immunogens to raise antibodies that specifically recognise
CC hGDMLP-1 proteins, as standards in assays used to determine the
CC concentration and/or amount specifically of hGDMLP proteins, as specific
CC biomolecule capture probes for surface-enhanced laser desorption
CC ionisation, as therapeutic supplement in patients having specific
CC deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC diagnosing a disorder associated with the expression of hGDMLP-1, in
CC particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC chromosome 22. The present sequence represents an oligomer used in the
CC screening of the hGDMLP-1 sequence in the exemplification of the present
CC invention.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ Sequence 17 BP; 4 A; 7 C; 5 G; 1 T; 0 other;

Query Match 0.6%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 714 GCTGTGGGCCAT 725
||||||||||||
Db 12 GCTGTGGGCCAT 1

RESULT 316
ABT37519/c
ID ABT37519 standard; DNA; 17 BP.
XX
AC ABT37519;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 3156.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.

```
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 403; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 6 A; 4 C; 1 G; 6 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1052 ATTTTGAGAGAG 1063
              ||||||||||||
Db         15 ATTTTGAGAGAG 4


RESULT 317
ABT38615/c
ID   ABT38615 standard; DNA; 17 BP.
XX
AC   ABT38615;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 4252.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 531; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 other;

  Query Match             0.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        686 GAAGATACTGAT 697
              ||||||||||||
Db         13 GAAGATACTGAT 2


RESULT 318
AAT55162
ID   AAT55162 standard; RNA; 15 BP.
XX
AC   AAT55162;
XX
DT   25-MAR-2003  (updated)
DT   22-APR-1997  (first entry)
XX
DE   Human relA hammerhead ribozyme target sequence (nt. position 1665).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome;
KW   AIDS; ss.
XX
OS   Homo sapiens.
```

XX
PN WO9523225-A2.
XX
PD 31-AUG-1995.
XX
PF 23-FEB-1995; 95WO-IB00156.
XX
PR 30-JAN-1995; 95US-0380734.
PR 23-FEB-1994; 94US-0201109.
PR 29-MAR-1994; 94US-0218934.
PR 04-APR-1994; 94US-0222795.
PR 07-APR-1994; 94US-0224483.
PR 15-APR-1994; 94US-0227958.
PR 15-APR-1994; 94US-0228041.
PR 18-MAY-1994; 94US-0245736.
PR 06-JUL-1994; 94US-0271280.
PR 15-AUG-1994; 94US-0291932.
PR 16-AUG-1994; 94US-0291433.
PR 17-AUG-1994; 94US-0292620.
PR 19-AUG-1994; 94US-0293520.
PR 02-SEP-1994; 94US-0300000.
PR 08-SEP-1994; 94US-0303039.
PR 23-SEP-1994; 94US-0311486.
PR 23-SEP-1994; 94US-0311749.
PR 28-SEP-1994; 94US-0314397.
PR 03-OCT-1994; 94US-0316771.
PR 07-OCT-1994; 94US-0319492.
PR 11-OCT-1994; 94US-0321993.
PR 04-NOV-1994; 94US-0334847.
PR 10-NOV-1994; 94US-0337608.
PR 28-NOV-1994; 94US-0345516.
PR 16-DEC-1994; 94US-0357577.
PR 23-DEC-1994; 94US-0363233.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
PI Grimm S, Karpeisky A, Kisich K, Matulic-adamic J, Mcswiggen JA;
PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D;
PI Thompson JD, Tracz D, Usman N, Wincott FE, Woolf T;
XX
DR WPI; 1995-351090/45.
XX
PT Ribozymes having modified bases and methods for producing them -
PT for use in inhibiting disease related genes
XX
PS Claim 2; Page 229; 407pp; English.
XX
CC The present sequence represents a preferred target sequence for an
CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA
CC mRNA at the nucleotide base position indicated in the DE line.
CC The relA gene product is a subunit of the transcriptional
CC regulator NF-kappaB and is implicated specifically in the induction
CC of inflammatory responses. Regions of the mRNA that do not form
CC secondary folding structures and that contain potential hammerhead
CC and hairpin ribozyme cleavage sites were identified by computer
CC analysis. Ribozymes directed against these mRNA sequences were
CC designed and synthesised with modifications that improve their
CC nuclease resistance. The ribozymes are designed to cleave the
CC target sequences and thereby inhibit relA expression, making them
CC potentially useful for treating rheumatoid arthritis, restenosis
CC and asthma as well as for increasing tolerance to transplanted
CC tissues. The potential immunosuppressive properties of a ribozyme
CC that cleaves relA mRNA means that uses are limited to local
CC delivery, acute indications or ex vivo treatment.
CC (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 15 BP; 3 A; 4 C; 3 G; 5 U; 0 other;

Query Match 0.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 60.0%; Pred. No. 2.4e+02;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 820 CTGCCTTCAGGAGAT 834
|: | ::|||||:
Db 1 CUCCUUUCAGGAGAU 15

RESULT 319
AAX66308/c
ID AAX66308 standard; RNA; 15 BP.
XX
AC AAX66308;
XX
DT 20-JUL-1999 (first entry)
XX
DE Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2940.
XX
KW Arthritic condition; graft tolerance; immune response; target; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW diagnosis; ss.
XX
OS Mus sp.
XX
PN WO9618736-A2.
XX
PD 20-JUN-1996.
XX
PF 22-NOV-1995; 95WO-US15516.
XX
PR 05-OCT-1995; 95US-0541365.
PR 13-DEC-1994; 94US-0354920.
PR 23-DEC-1994; 94US-0363253.
PR 23-DEC-1994; 94US-0363254.
PR 17-FEB-1995; 95US-0390850.
PR 20-APR-1995; 95US-0426124.
PR 02-MAY-1995; 95US-0432874.
PR 04-MAY-1995; 95US-0434509.
PR 07-JUL-1995; 95US-0000951.
PR 07-JUL-1995; 95US-0000974.
PR 07-AUG-1995; 95US-0512861.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Draper K, Gustofson J, McSwiggen J, Pavco P, Stinchcomb DT;
PI Beigelman L, Karpeisky A, Modak A, Usman N, Burgin A;
PI Matulic-Adamic J, Jarvis T, Thompson JD, Wincott F;
XX
DR WPI; 1996-300653/30.
XX
PT Enzymatic nucleic acid molecules having a hammer-head motif - used
PT for the treatment of arthritis, induction of graft tolerance or
PT treatment of auto-immune diseases
XX
PS Claim 10; Page 197; 307pp; English.
XX
CC The present invention describes a novel enzymatic nucleic acid (ENA)
CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose
CC residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii)
CC at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification.
CC The ENA's can inhibit collagenase and stromelysin production in the
CC synovial membrane of joints for the treatment or prevention of arthritis,
CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC be used to treat antigen presenting cells of a donor to induce tolerance
CC in a recipient to an alloantigen of a donor. They can also be used for
CC enhancing graft tolerance or for treating autoimmune disease, and for
CC treating allergies and other inflammatory conditions. The ENA's can also
CC be used in diagnosis. Ribozyme therapy impacts on the expression of
CC stromelysin without introducing the non-specific effects upon gene
CC expression which accompany treatment with retinoids and dexamethasone.
CC The concentration of ribozyme required to affect a therapeutic treatment
CC is lower than that required of antisense molecules, and is highly
CC specific. The present sequence is used in the exemplification of the
CC present invention.

```
XX
SQ   Sequence 15 BP; 3 A; 6 C; 0 G; 6 U; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        825 TTCAGGAGATAGAAA 839
              || ||||||| ||||
Db         15 TTGAGGAGATGGAAA 1


RESULT 320
AAX66309/c
ID   AAX66309 standard; RNA; 15 BP.
XX
AC   AAX66309;
XX
DT   20-JUL-1999  (first entry)
XX
DE   Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2941.
XX
KW   Arthritic condition; graft tolerance; immune response; target; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW   stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW   rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW   diagnosis; ss.
XX
OS   Mus sp.
XX
PN   WO9618736-A2.
XX
PD   20-JUN-1996.
XX
PF   22-NOV-1995;   95WO-US15516.
XX
PR   05-OCT-1995;   95US-0541365.
PR   13-DEC-1994;   94US-0354920.
PR   23-DEC-1994;   94US-0363253.
PR   23-DEC-1994;   94US-0363254.
PR   17-FEB-1995;   95US-0390850.
PR   20-APR-1995;   95US-0426124.
PR   02-MAY-1995;   95US-0432874.
PR   04-MAY-1995;   95US-0434509.
PR   07-JUL-1995;   95US-0000951.
PR   07-JUL-1995;   95US-0000974.
PR   07-AUG-1995;   95US-0512861.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Draper K,  Gustofson J,  McSwiggen J,  Pavco P,  Stinchcomb DT;
PI   Beigelman L,  Karpeisky A,  Modak A,  Usman N,  Burgin A;
PI   Matulic-Adamic J,  Jarvis T,  Thompson JD,  Wincott F;
XX
DR   WPI; 1996-300653/30.
XX
PT   Enzymatic nucleic acid molecules having a hammer-head motif - used
PT   for the treatment of arthritis, induction of graft tolerance or
PT   treatment of auto-immune diseases
XX
PS   Claim 10; Page 197; 307pp; English.
XX
CC   The present invention describes a novel enzymatic nucleic acid (ENA)
CC   having a hammerhead motif (HM) comprising: (i) at least 5 ribose
CC   residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii)
CC   at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification.
CC   The ENA's can inhibit collagenase and stromelysin production in the
CC   synovial membrane of joints for the treatment or prevention of arthritis,
CC   particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC   be used to treat antigen presenting cells of a donor to induce tolerance
CC   in a recipient to an alloantigen of a donor. They can also be used for
CC   enhancing graft tolerance or for treating autoimmune disease, and for
CC   treating allergies and other inflammatory conditions. The ENA's can also
CC   be used in diagnosis. Ribozyme therapy impacts on the expression of
CC   stromelysin without introducing the non-specific effects upon gene
CC   expression which accompany treatment with retinoids and dexamethasone.
CC   The concentration of ribozyme required to affect a therapeutic treatment
CC   is lower than that required of antisense molecules, and is highly
CC   specific. The present sequence is used in the exemplification of the
CC   present invention.
XX
SQ   Sequence 15 BP; 3 A; 6 C; 0 G; 6 U; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        825 TTCAGGAGATAGAAA 839
              || ||||||| ||||
Db         15 TTGAGGAGATGGAAA 1


RESULT 321
AAX66233/c
ID   AAX66233 standard; RNA; 15 BP.
XX
AC   AAX66233;
XX
DT   20-JUL-1999  (first entry)
XX
DE   Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2865.
XX
KW   Arthritic condition; graft tolerance; immune response; target; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
KW   stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
KW   rheumatoid arthritis; autoimmune disease; allergy; inflammation;
KW   diagnosis; ss.
XX
OS   Mus sp.
XX
PN   WO9618736-A2.
XX
PD   20-JUN-1996.
XX
PF   22-NOV-1995;   95WO-US15516.
XX
PR   05-OCT-1995;   95US-0541365.
PR   13-DEC-1994;   94US-0354920.
PR   23-DEC-1994;   94US-0363253.
PR   23-DEC-1994;   94US-0363254.
PR   17-FEB-1995;   95US-0390850.
PR   20-APR-1995;   95US-0426124.
PR   02-MAY-1995;   95US-0432874.
PR   04-MAY-1995;   95US-0434509.
PR   07-JUL-1995;   95US-0000951.
PR   07-JUL-1995;   95US-0000974.
PR   07-AUG-1995;   95US-0512861.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Draper K,  Gustofson J,  McSwiggen J,  Pavco P,  Stinchcomb DT;
PI   Beigelman L,  Karpeisky A,  Modak A,  Usman N,  Burgin A;
PI   Matulic-Adamic J,  Jarvis T,  Thompson JD,  Wincott F;
XX
DR   WPI; 1996-300653/30.
XX
PT   Enzymatic nucleic acid molecules having a hammer-head motif - used
PT   for the treatment of arthritis, induction of graft tolerance or
PT   treatment of auto-immune diseases
XX
PS   Claim 10; Page 197; 307pp; English.
XX
CC   The present invention describes a novel enzymatic nucleic acid (ENA)
CC   having a hammerhead motif (HM) comprising: (i) at least 5 ribose
CC   residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii)
CC   at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification.
```

```
CC   The ENA's can inhibit collagenase and stromelysin production in the
CC   synovial membrane of joints for the treatment or prevention of arthritis,
CC   particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
CC   be used to treat antigen presenting cells of a donor to induce tolerance
CC   in a recipient to an alloantigen of a donor. They can also be used for
CC   enhancing graft tolerance or for treating autoimmune disease, and for
CC   treating allergies and other inflammatory conditions. The ENA's can also
CC   be used in diagnosis. Ribozyme therapy impacts on the expression of
CC   stromelysin without introducing the non-specific effects upon gene
CC   expression which accompany treatment with retinoids and dexamethasone.
CC   The concentration of ribozyme required to affect a therapeutic treatment
CC   is lower than that required of antisense molecules, and is highly
CC   specific. The present sequence is used in the exemplification of the
CC   present invention.
XX
SQ   Sequence 15 BP; 5 A; 5 C; 0 G; 5 U; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        740 TTGAGGATTATTGAT 754
              | |||||| ||||||
Db         15 TGGAGGATAATTGAT 1


RESULT 322
AAV49184
ID   AAV49184 standard; DNA; 15 BP.
XX
AC   AAV49184;
XX
DT   15-OCT-1998  (first entry)
XX
DE   rb gene antisense oligonucleotide rb-N-132.
XX
KW   rb gene; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP856579-A1.
XX
PD   05-AUG-1998.
XX
PF   31-JAN-1997;   97EP-0101531.
XX
PR   31-JAN-1997;   97EP-0101531.
XX
PA   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI   Brysch W,  Schlingensiepen K;
XX
DR   WPI; 1998-400910/35.
XX
PT   Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT   consecutive guanosine or inosine - and have specific ratio of
PT   residues able to form two or three hydrogen bonds, have greater
PT   activity and reduced toxicity, used therapeutically or to modulate
PT   growth of cells in culture
XX
PS   Example 7; Fig 9c; 286pp; English.
XX
CC   AAV49008-236 represent antisense oligonucleotides directed against
CC   the rb gene. Of these, only oligonucleotides AAV49008-52 resulted in
CC   effective downregulation of negative growth control by rb, while
CC   oligonucleotides AAV49052-236 had little effect. The oligonucleotides
CC   exemplify the invention. The specification describes oligonucleotides
CC   that contain 8-30 nucleotides, which contain at most 8 nucleotides
CC   that can each form three hydrogen bonds to cytosine; do not contain
CC   four consecutive nucleotides able to form three H-bonds each to four
CC   consecutive cytosines; do not contain two sequences of three consecutive
CC   nucleotides each able to form three H-bonds to three consecutive
CC   cytosines, and the ratio between residues able to form two H-bonds
CC   each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC   oligonucleotides are used to modulate expression of genes, particularly
CC   the genes for p53, ErB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC   proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC   kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC   oligonucleotides can also be used to analyse function of proteins (by
CC   altering their expression or activity) and therapeutically, e.g. in
CC   cases of cancer or (targeting TGF) for stimulating the immune system.
XX
SQ   Sequence 15 BP; 5 A; 0 C; 2 G; 8 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        985 TGATTTTGAGATTAA 999
              ||||||||| ||||
Db          1 TGATTTTGAATTTAA 15


RESULT 323
AAV49184/c
ID   AAV49184 standard; DNA; 15 BP.
XX
AC   AAV49184;
XX
DT   15-OCT-1998  (first entry)
XX
DE   rb gene antisense oligonucleotide rb-N-132.
XX
KW   rb gene; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP856579-A1.
XX
PD   05-AUG-1998.
XX
PF   31-JAN-1997;   97EP-0101531.
XX
PR   31-JAN-1997;   97EP-0101531.
XX
PA   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI   Brysch W,  Schlingensiepen K;
XX
DR   WPI; 1998-400910/35.
XX
PT   Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT   consecutive guanosine or inosine - and have specific ratio of
PT   residues able to form two or three hydrogen bonds, have greater
PT   activity and reduced toxicity, used therapeutically or to modulate
PT   growth of cells in culture
XX
PS   Example 7; Fig 9c; 286pp; English.
XX
CC   AAV49008-236 represent antisense oligonucleotides directed against
CC   the rb gene. Of these, only oligonucleotides AAV49008-52 resulted in
CC   effective downregulation of negative growth control by rb, while
CC   oligonucleotides AAV49052-236 had little effect. The oligonucleotides
CC   exemplify the invention. The specification describes oligonucleotides
CC   that contain 8-30 nucleotides, which contain at most 8 nucleotides
CC   that can each form three hydrogen bonds to cytosine; do not contain
CC   four consecutive nucleotides able to form three H-bonds each to four
CC   consecutive cytosines; do not contain two sequences of three consecutive
CC   nucleotides each able to form three H-bonds to three consecutive
CC   cytosines, and the ratio between residues able to form two H-bonds
CC   each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC   oligonucleotides are used to modulate expression of genes, particularly
CC   the genes for p53, ErB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC   proliferation of primary cell cultures (e.g. bone marrow stem, liver or
```

```
CC   kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC   oligonucleotides can also be used to analyse function of proteins (by
CC   altering their expression or activity) and therapeutically, e.g. in
CC   cases of cancer or (targeting TGF) for stimulating the immune system.
XX
SQ   Sequence 15 BP; 5 A; 0 C; 2 G; 8 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1984 TTAAATACAATATCA 1998
                ||||||  ||| ||||
Db         15 TTAAATTCAAAATCA 1


RESULT 324
AAX31435
ID   AAX31435 standard; DNA; 15 BP.
XX
AC   AAX31435;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Tag sequence of a transcript decreased in colorectal cancer.
XX
KW   Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW   diagnosis; prognosis; treatment; ss.
XX
OS   Homo sapiens.
XX
PN   WO9853319-A2.
XX
PD   26-NOV-1998.
XX
PF   20-MAY-1998;   98WO-US10277.
XX
PR   21-MAY-1997;   97US-0047352.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Kinzler KW,  Vogelstein B;
XX
DR   WPI; 1999-070161/06.
XX
PT   Use of isolated gene transcripts - useful for developing products
PT   for the diagnosis, prognosis and treatment of cancers, particularly
PT   colon and pancreatic cancer
XX
PS   Claim 1; Page 50; 120pp; English.
XX
CC   AAX30947-31815 represent tag sequences of transcripts that are
CC   differentially expressed in colorectal cancer, in pancreatic
CC   cancer, or in both. The tag sequences can be used to identify
CC   genes by matching the tag to a gen data base member, or by using
CC   the tag sequences as probes to isolate unidentified genes from
CC   cDNA libraries. The tag sequences can also be used in a method
CC   for diagnosing colon or pancreatic cancer in a sample suspected
CC   of being neoplastic. The method comprises comparing the level of
CC   at least one transcript in a first sample of a tissue to a second
CC   sample, where the first sample is a colonic tissue suspected of
CC   being neoplastic and the second sample is a normal human colonic
CC   tissue. The transcript is identified by a tag selected from
CC   AAX30947-31815. The methods of the invention can be used in the
CC   diagnosis, prognosis and treatment of cancer.
XX
SQ   Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        954 CATGTGTTGTGTGCA 968
                ||||||  ||| ||||
Db          1 CATGTGGTGTATGCA 15


RESULT 325
AAX30954
ID   AAX30954 standard; DNA; 15 BP.
XX
AC   AAX30954;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Tag sequence of a transcript increased in colorectal cancer.
XX
KW   Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW   diagnosis; prognosis; treatment; ss.
XX
OS   Homo sapiens.
XX
PN   WO9853319-A2.
XX
PD   26-NOV-1998.
XX
PF   20-MAY-1998;   98WO-US10277.
XX
PR   21-MAY-1997;   97US-0047352.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Kinzler KW,  Vogelstein B;
XX
DR   WPI; 1999-070161/06.
XX
PT   Use of isolated gene transcripts - useful for developing products
PT   for the diagnosis, prognosis and treatment of cancers, particularly
PT   colon and pancreatic cancer
XX
PS   Claim 2; Page 22; 120pp; English.
XX
CC   AAX30947-31815 represent tag sequences of transcripts that are
CC   differentially expressed in colorectal cancer, in pancreatic
CC   cancer, or in both. The tag sequences can be used to identify
CC   genes by matching the tag to a gen data base member, or by using
CC   the tag sequences as probes to isolate unidentified genes from
CC   cDNA libraries. The tag sequences can also be used in a method
CC   for diagnosing colon or pancreatic cancer in a sample suspected
CC   of being neoplastic. The method comprises comparing the level of
CC   at least one transcript in a first sample of a tissue to a second
CC   sample, where the first sample is a colonic tissue suspected of
CC   being neoplastic and the second sample is a normal human colonic
CC   tissue. The transcript is identified by a tag selected from
CC   AAX30947-31815. The methods of the invention can be used in the
CC   diagnosis, prognosis and treatment of cancer.
XX
SQ   Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        954 CATGTGTTGTGTGCA 968
                ||||||  ||| ||||
Db          1 CATGTGGTGTATGCA 15


RESULT 326
AAX14674
ID   AAX14674 standard; DNA; 15 BP.
XX
AC   AAX14674;
XX
DT   24-MAR-1999  (first entry)
XX
```

```
DE   Triple helix forming nucleotides 144-158 of gamma-crystallin gene.
XX
KW   Triple-helix forming region; Triplex formation; DNA detection;
KW   identification; bacteria; oncogene; virus; ds.
XX
OS   Homo sapiens.
XX
PN   US5861244-A.
XX
PD   19-JAN-1999.
XX
PF   22-DEC-1993;   93US-0173489.
XX
PR   22-DEC-1993;   93US-0173489.
PR   29-OCT-1992;   92US-0968436.
XX
PA   (PROF-) PROFILE DIAGNOSTIC SCI INC.
XX
PI   Hepburn AG,  Wang C;
XX
DR   WPI; 1999-130384/11.
XX
PT   Assay of genetic sequences based on triplex formation from double
PT   stranded analyte - and hybrid of anchor and reporter sequences, with
PT   reporter released if triplex formation occurs, used e.g. to identify
PT   bacteria
XX
PS   Disclosure; Columns 15-16; 168pp; English.
XX
CC   The present sequence represents a potential triple-helix forming region.
CC   It can be used to demonstrate the assay of the invention. The assay
CC   comprises adding a sample containing double-stranded DNA test sequences,
CC   e.g. containing the present sequence, to an aqueous medium containing at
CC   least one complex of anchor DNA, attached to a solid support, and
CC   reporter DNA, where either a part of the anchor DNA or reporter DNA is
CC   designed to form a triple-strand structure with part of the test
CC   sequence. Triplex formation results in displacement of the reporter DNA
CC   which is detected as an indication of the presence of the DNA test
CC   sequence. The method is used to detect DNA sequences, particularly for
CC   identification of bacteria (by detecting genes for ribosomal RNA) in
CC   clinical samples, but also detection of oncogenes and Hepatitis B virus.
XX
SQ   Sequence 15 BP; 12 A; 0 C; 2 G; 1 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        915 AAAATGAGAAAAGAG 929
              ||||||| |||| ||
Db          1 AAAATGAAAAAAAAG 15


RESULT 327
AAZ60708/c
ID   AAZ60708 standard; DNA; 15 BP.
XX
AC   AAZ60708;
XX
DT   16-MAY-2000  (first entry)
XX
DE   Nucleotide sequence of an amplified human lactoferrin fragment.
XX
KW   Human; lactoferrin; mass production; antibacterial; ss.
XX
OS   Homo sapiens.
XX
PN   WO200004132-A1.
XX
PD   27-JAN-2000.
XX
PF   14-JUL-1999;   99WO-KR00373.
XX
PR   15-JUL-1998;   98KR-0029351.
PR   13-JUL-1999;   99KR-0029042.
XX
PA   (SAMY-) SAMYANG GENEX CORP.
XX
PI   Sung CK,  Joo IS,  Woo MS,  Kim SK,  Lee JH,  Lee KS,  Kim YH;
PI   Hong SS,  Lee H;
XX
DR   WPI; 2000-182411/16.
DR   P-PSDB; AAY68868.
XX
PT   Lactoferrin polypeptides used as e.g. bactericides or growth promoters,
PT   are mass produced from genetically engineered micro-organisms -
XX
PS   Example 2; Page 8; 24pp; English.
XX
CC   The present sequence represents an amplified fragment of the human
CC   lactoferrin gene, derived from primer B (see AAZ60705). The encoded
CC   peptide contains the disulphide cysteine bond. The amplified fragment
CC   was cloned, and used in the method of the invention. The specification
CC   describes a method for the mass production and culture of lactoferrin
CC   polypeptides from micro-organisms. The method uses plasmid vectors to
CC   transform yeast cells that are resistant to lactoferrin polypeptides.
CC   As the micro-organism is resistant to the antibacterial peptide
CC   produced, the number of contaminating organisms is reduced whilst
CC   maintaining high polypeptide production rates. The micro-organism is
CC   useful in the mass production of lactoferrin polypeptides. The
CC   micro-organism can also be used to produce other antibacterial peptides
CC   that are difficult to mass produce due to their ability to slow down
CC   the growth of, or even kill, host cells.
XX
SQ   Sequence 15 BP; 6 A; 1 C; 3 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        998 AAATCTCTTGATGAA 1012
              ||||||||| ||| |
Db         15 AAATCTCTTTATGCA 1


RESULT 328
AAD15782/c
ID   AAD15782 standard; DNA; 15 BP.
XX
AC   AAD15782;
XX
DT   15-NOV-2001  (first entry)
XX
DE   Human interleukin 15 (IL-15) gene polymorphism detecting ASO primer #30.
XX
KW   Human; interleukin 15; IL-15; gene therapy; chromosome 4q31; infection;
KW   drug screening; anthropological lineage; paternity testing; HIV; primer;
KW   Human Immunodeficiency Virus; forensic application; T-cell leukaemia;
KW   ASO; allele-specific oligonucleotide; ss.
XX
OS   Homo sapiens.
XX
PN   WO200158914-A2.
XX
PD   16-AUG-2001.
XX
PF   08-FEB-2001; 2001WO-US04130.
XX
PR   08-FEB-2000; 2000US-0181059.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Chew A,  Denton RR,  Nandabalan K,  Stephens JC;
XX
DR   WPI; 2001-522460/57.
XX
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```
PT   Novel polynucleotides comprising one of 11, PS1-PS11, single nucleotide
PT   polymorphisms in human interleukin-15 gene, and useful for treating
PT   disorders affected by expression of function of interleukin-15 isogene
PT   -
XX
PS   Claim 16; Page 17; 78pp; English.
XX
CC   The present sequence is allele-specific oligonucleotide (ASO) primer
CC   useful for detecting human interleukin-15 (IL-15) gene polymorphism
CC   located on chromosome 4q31. The polymorphic variants of IL-15 genes are
CC   useful for studying the expression and function of IL-15 and expressing
CC   IL-15 protein for use in useful for screening for candidate drugs to
CC   treat diseases related to IL-15 activity. Genotyping or haplotyping an
CC   individual at the novel IL-15 polymorphic sites are useful for studying
CC   population diversity, anthropological lineage, the significance of
CC   diversity and lineage of the phenotypic level, paternity testing,
CC   forensic applications and for identifying associations between IL-15
CC   genetic variation and a trait such as level of drug response or
CC   susceptibility to disease. Identifying an association between a genotype
CC   or haplotype and a trait, is useful for developing diagnostic tests and
CC   therapeutic treatments for infections, human immunodeficiency virus and
CC   T-cell leukaemia. The identification of an association between a clinical
CC   response and a genotype or haplotype (or haplotype pair) for the IL-15
CC   gene may be the basis for designing a diagnostic method to determine
CC   those individuals who will or will not respond to the treatment, or
CC   alternatively, will respond at a lower level and thus may require more
CC   treatment, i.e. a greater dose of a drug. The genotyping or haplotyping
CC   methods are also useful for developing drugs targetting IL-15. The
CC   genotyping and haplotyping methods are also useful in designing clinical
CC   trials. IL-15 DNA is useful for therapeutic purposes for treating
CC   disorders affected by expression of function of novel IL-15 isogene and
CC   also in gene therapy. Expression of an IL-15 isogene may be turned off
CC   by transforming a targetted organ, tissue or cell population of an
CC   expression vector that expresses high levels of untranslatable mRNA for
CC   the isogene.
XX
SQ   Sequence 15 BP; 6 A; 1 C; 0 G; 8 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        987 ATTTTGAGATTAAAT 1001
              ||||||| | |||||
Db         15 ATTTTGAAAATAAAT 1

RESULT 329
AAH19694
ID   AAH19694 standard; DNA; 15 BP.
XX
AC   AAH19694;
XX
DT   30-JUL-2001  (first entry)
XX
DE   Human transcription factor ISGF-3B sense PNA-oligomer.
XX
KW   Human; transcription factor; ISGF-3B; PNA; peptide nucleic acid;
KW   cDNA synthesis inhibition; nucleic acid amplification inhibition;
KW   blocking primer; polyamide backbone; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..15
FT                    /*tag=  a
FT                    /note= "This sequence is a peptide nucleic acid,
FT                           i.e. it contains a polyamide backbone
FT                           instead of a deoxyribose backbone. The
FT                           sequence is labelled with biotin"
XX
PN   WO200132931-A2.
XX
PD   10-MAY-2001.
XX
PF   02-NOV-2000; 2000WO-US41798.
XX
PR   02-NOV-1999;   99US-0162943.
PR   27-OCT-2000; 2000US-0162943.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Oemar BS,  Simons JF;
XX
DR   WPI; 2001-343489/36.
XX
PT   Selectively inhibiting amplification of target nucleic acid in
PT   population of nucleic acid molecules -
XX
PS   Example 1; Page 7; 17pp; English.
XX
CC   The present sequence is a peptide nucleic acid (PNA)-oligomer specific
CC   for transcription factor ISGF-3B. It was used to inhibit the first
CC   strand cDNA synthesis of polyA+ mRNA isolated from human MG-63 cells.
CC   This was performed as an example illustrating an invention relating
CC   to a method for selectively inhibiting amplification of a target nucleic
CC   acid in a population of nucleic acid molecules. The method comprises
CC   contacting the population with a blocking primer followed by at least one
CC   extendable primer, and extending the annealed extending-primer template
CC   complex with a polymerase, thereby selectively inhibiting amplification
CC   of the target nucleic acid. The method can be used on any population of
CC   nucleic acid molecules, e.g. genomic DNA, cDNA or mRNA. When RNA is
CC   used it can be derived from a plant, a single-celled animal, a
CC   multi-cellular animal, a bacterium, a virus, a fungus, or a yeast.
CC   Any desired sequence can be selectively inhibited providing that it is
CC   possible to design a blocking primer that binds specifically to that
CC   sequence.
XX
SQ   Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        878 CAGACTTGGCACCCA 892
              ||| |||||||| | |
Db          1 CAGTCTTGGCACCTA 15

RESULT 330
AAF80936/c
ID   AAF80936 standard; DNA; 15 BP.
XX
AC   AAF80936;
XX
DT   02-MAY-2001  (first entry)
XX
DE   PTGS2 allele specific oligonucleotide probe SEQ ID 42.
XX
KW   Human; prostaglandin-endoperoxide synthase 2; PTGS2; cyclooxygenase 2;
KW   single nucleotide polymorphism; SNP; immune-related disorder; arthritis;
KW   inflammation; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO200107662-A1.
XX
PD   01-FEB-2001.
XX
PF   24-JUL-2000; 2000WO-US20114.
XX
PR   22-JUL-1999;   99US-0145170.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Denton RR,  Nandabalan K,  Sanchis A,  Stephens JC,  Tanguay DA;
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XX
DR   WPI; 2001-182805/18.
XX
PT   New nucleic acid containing polymorphisms in the cyclooxygenase-2 gene,
PT   for gene therapy of inflammation and for establishing a genotype or
PT   haplotype  -
XX
PS   Disclosure; Page 22; 118pp; English.
XX
CC   This invention relates to a polynucleotide sequence that is a polymorphic
CC   variant of the human prostaglandin-endoperoxide synthase 2 (PTGS2) gene
CC   also referred to as cyclooxygenase 2. The human PTGS2 gene sequence
CC   AAF80896 contains 27 single nucleotide polymorphisms (SNPs). AAF80896 and
CC   AAF80897 represent human PTGS2 gene and coding sequence, and the PTGS2
CC   protein is represented by AAB72199. The invention includes PCR and
CC   sequencing primers, and probes represented in AAF80898 - AAF81151 which
CC   are used to isolated and characterise the PTGS2 gene sequence, and to
CC   locate the positions of the SNPs. PTGS2 proteins and polynucleotide
CC   sequences are used to express variant PTGS2 proteins, for structural
CC   analysis or drug-binding studies and also in gene therapy (either
CC   expressing PTGS2 or inhibitory RNA). Antibodies raised against PTGS2 are
CC   useful for diagnosis, prognosis and therapy and analysis of the new, and
CC   known, polymorphisms and used to determine PTGS2 haplotype and genotype,
CC   especially for determining association between a particular trait, e.g. a
CC   clinical response to drugs that target PTGS2 but also disease
CC   susceptibility, severity or stage. Anti-PTGS2 antibodies are particularly
CC   used for developing diagnostic tests and treatments for immune-related
CC   disorders such as arthritis and inflammation. The polymorphisms may also
CC   be used to study expression and biological function of PTGS2. Transgenic
CC   animals that express PTGS2 are used to study expression of PTGS2
CC   isogenes, for in vivo drug screening and testing, and for assessing
CC   effects of therapeutic agents.
XX
SQ   Sequence 15 BP; 2 A; 2 C; 4 G; 7 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        765 AAGAAGTCATAACTC 779
              |||| |||| |||||
Db         15 AAGACGTCAAAACTC 1


RESULT 331
AAF70327
ID   AAF70327 standard; DNA; 15 BP.
XX
AC   AAF70327;
XX
DT   20-APR-2001  (first entry)
XX
DE   Human DRD2 allele specific oligonucleotide primer SEQ ID NO:70.
XX
KW   Human; dopamine receptor D2; DRD2; polymorphism; allele specific;
KW   drug target isogene; detection; single nucleotide polymorphism; SNP;
KW   genotype; schizophrenia; Parkinson's disease; myoclonus dystonia; MD;
KW   probe; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200105832-A1.
XX
PD   25-JAN-2001.
XX
PF   19-JUL-2000; 2000WO-US19644.
XX
PR   19-JUL-1999;   99US-0144493.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Duda A,  Nandabalan K,  Stephens JC;
XX
DR   WPI; 2001-091967/10.
XX
PT   Polynucleotides comprising single nucleotide polymorphisms in the human
PT   dopamine receptor D2, useful for detecting mutations associated with,
PT   e.g. schizophrenia, Parkinson's and myoclonus dystonia -
XX
PS   Claim 15; Page 23; 135pp; English.
XX
CC   The present invention describes polynucleotides comprising single
CC   nucleotide polymorphisms (SNPs) in the human dopamine receptor D2 (DRD2).
CC   The polynucleotides may be used in assays to detect and characterise
CC   polymorphisms in DRD2 that affect its expression and activity and are
CC   involved in disorders such as schizophrenia, Parkinson's and myoclonus
CC   dystonia (MD). This information would be useful for studying the
CC   biological function of DRD2 as well as in identifying drugs targeting
CC   this protein for the treatment of disorders related to its abnormal
CC   expression or function. Polymorphisms in the DRD2 gene affect the
CC   expression of active and functional polypeptides. Therefore it is
CC   advantageous to detect polymorphisms in the DRD2 gene and how those
CC   polymorphisms are combined in different copies of the gene. AAF70261 to
CC   AAF70308 represent human DRD2 allele specific oligonucleotide probes,
CC   and AAF70309 to AAF70404 represent human DRD2 allele specific
CC   oligonucleotide primers which are used in the detection of DRD2
CC   polymorphisms. AAF70405 to AAF70452 represent oligonucleotide primers
CC   for the detection of human DRD2 polymorphisms which are given in the
CC   exemplification of the present invention. AAF70453 to AAF70538 represent
CC   PCR primers for the human DRD2 gene which are used in examples from the
CC   present invention.
XX
SQ   Sequence 15 BP; 1 A; 1 C; 8 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        948 GTGGTCCATGTGTTG 962
              ||||| |||| ||||
Db          1 GTGGTGCATGGGTTG 15


RESULT 332
AAF49687/c
ID   AAF49687 standard; DNA; 15 BP.
XX
AC   AAF49687;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #647.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
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DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 65; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 4 A; 6 C; 2 G; 3 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        800 AGCAGCTGTTGTTGT 814
              ||||||  || |||||
Db         15 AGCAGCGGTAGTTGT 1


RESULT 333
AAF50723/c
ID   AAF50723 standard; DNA; 15 BP.
XX
AC   AAF50723;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1683.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        796 ATGTAGCAGCTGTTG 810
              ||||  |||||||||
Db         15 ATGTTCCAGCTGTTG 1


RESULT 334
AAF51599/c
ID   AAF51599 standard; DNA; 15 BP.
XX
AC   AAF51599;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2559.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 77; 201pp; English.
```

```
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 4 A; 4 C; 6 G; 1 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        882 CTTGGCACCCATGTC 896
              ||||| |||| |||
Db         15 CTTGGCTCCCAGGTC 1


RESULT 335
AAF52308/c
ID   AAF52308 standard; DNA; 15 BP.
XX
AC   AAF52308;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #3268.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 82; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 4 A; 4 C; 3 G; 4 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1004 CTTGATGAACAGTGT 1018
              | |||||| ||||||
Db         15 CATGATGACCAGTGT 1


RESULT 336
ABK14992
ID   ABK14992 standard; DNA; 15 BP.
XX
AC   ABK14992;
XX
DT   08-MAY-2002  (first entry)
XX
DE   Potato protease inhibitor, PI2, domain 2 DNA.
XX
KW   Phagemid; ds; phage-shock protein promoter; psp; PI2; plant;
KW   filamentous phage gene IV; phage display; potato protease inhibitor.
XX
OS   Solanum tuberosum.
XX
FH   Key             Location/Qualifiers
FT   CDS             1..15
FT                   /*tag=  a
FT                   /product= "PI2 domain 2"
FT                   /partial
FT                   /note= "No start or stop codon"
XX
PN   US6333187-B1.
XX
PD   25-DEC-2001.
XX
PF   30-SEP-1998;   98US-0163540.
XX
PR   30-SEP-1998;   98US-0163540.
XX
PA   (PLAN-) CENT PLANTENVEREDELINGS EN.
XX
PI   Beekwilder J,  Rakonjac J,  Bosch D,  Jongsma M,  Stiekema W;
PI   Jovanovic G;
XX
DR   WPI; 2002-153823/20.
DR   P-PSDB; AAU75892.
XX
PT   Collection of phagemids, useful for phage display of variant proteins,
PT   includes a promoter induced by expression of gene IV of filamentous
PT   phage  -
XX
PS   Disclosure; Fig 1; 19pp; English.
XX
CC   The invention relates to a collection of phagemids that comprise (i) the
CC   promoter of the Escherichia coli phage-shock protein (psp) operon linked
CC   to a gene encoding a fusion between a peptide and a filamentous,
CC   single-strand DNA phage coat protein, or its fragment, (ii) origin of
CC   replication (ori) from the specified phage and (iii) plasmid origin of
```

CC replication. The psp promoter is induced by expression of gene IV of
CC filamentous phage. Also included is a collection of E. coli clones or
CC cells that represent the phagemids, where the phagemids are in plasmid
CC form. The phagemids are useful for phage display to identify peptide
CC variants having a particular binding specificity, especially modified
CC plant protease inhibitors (e.g. potato protease inhibitor PI2) that bind
CC strongly to gut proteases in insects. The specified promoter provides
CC satisfactory control over the fusion gene, and eliminates the need for
CC delicate washing (to remove glucose) required for switching on the
CC conventional promoter, particularly useful for large scale production of
CC phage libraries in fermenters and in automated display processes.
CC The present sequence is the DNA encoding domain 2 of potato PI2.
CC This domain is used as the basis for a phage-display library of domain 2
CC variants.
XX
SQ Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 other;

Query Match 0.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 701 TGTACCCGAAATTGC 715
|| ||||||||||
Db 1 TGCCCCCGAAATTGC 15

RESULT 337
ABK14994
ID ABK14994 standard; DNA; 15 BP.
XX
AC ABK14994;
XX
DT 08-MAY-2002 (first entry)
XX
DE Potato protease inhibitor, PI2, mutant domain 2 DNA #1.
XX
KW Phagemid; ds; phage-shock protein promoter; psp; PI2; mutant; plant;
KW filamentous phage gene IV; phage display; potato protease inhibitor.
XX
OS Solanum tuberosum.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT mutation replace (6,G)
FT /*tag= a
XX
PN US6333187-B1.
XX
PD 25-DEC-2001.
XX
PF 30-SEP-1998; 98US-0163540.
XX
PR 30-SEP-1998; 98US-0163540.
XX
PA (PLAN-) CENT PLANTENVEREDELINGS EN.
XX
PI Beekwilder J, Rakonjac J, Bosch D, Jongsma M, Stiekema W;
PI Jovanovic G;
XX
DR WPI; 2002-153823/20.
XX
PT Collection of phagemids, useful for phage display of variant proteins,
PT includes a promoter induced by expression of gene IV of filamentous
PT phage -
XX
PS Disclosure; Column 19; 19pp; English.
XX
CC The invention relates to a collection of phagemids that comprise (i) the
CC promoter of the Escherichia coli phage-shock protein (psp) operon linked
CC to a gene encoding a fusion between a peptide and a filamentous,
CC single-strand DNA phage coat protein, or its fragment, (ii) origin of
CC replication (ori) from the specified phage and (iii) plasmid origin of
CC replication. The psp promoter is induced by expression of gene IV of
CC filamentous phage. Also included is a collection of E. coli clones or
CC cells that represent the phagemids, where the phagemids are in plasmid
CC form. The phagemids are useful for phage display to identify peptide
CC variants having a particular binding specificity, especially modified
CC plant protease inhibitors (e.g. potato protease inhibitor PI2) that bind
CC strongly to gut proteases in insects. The specified promoter provides
CC satisfactory control over the fusion gene, and eliminates the need for
CC delicate washing (to remove glucose) required for switching on the
CC conventional promoter, particularly useful for large scale production of
CC phage libraries in fermenters and in automated display processes.
CC The present sequence is a DNA encoding a representative mutant domain 2
CC of potato PI2 as expressed by the phagemid library.
XX
SQ Sequence 15 BP; 3 A; 6 C; 3 G; 3 T; 0 other;

Query Match 0.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 701 TGTACCCGAAATTGC 715
|| ||||||||||
Db 1 TGCCCCCGAAATTGC 15

RESULT 338
ABK31907
ID ABK31907 standard; DNA; 15 BP.
XX
AC ABK31907;
XX
DT 23-APR-2002 (first entry)
XX
DE Human colon cancer SAGE tag #8.
XX
KW Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW serial analysis of gene expression; diagnostic; prognostic; probe;
KW cancer marker; ss.
XX
OS Homo sapiens.
XX
PN US6333152-B1.
XX
PD 25-DEC-2001.
XX
PF 20-MAY-1998; 98US-0081646.
XX
PR 20-MAY-1998; 98US-0081646.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Vogelstein B, Kinzler KW, Zhang L, Zhou W;
XX
DR WPI; 2002-153821/20.
XX
PT New human nucleic acid containing specific SAGE tags, useful as
PT diagnostic markers for cancer, also derived probes -
XX
PS Disclosure; Column 13; 161pp; English.
XX
CC The invention relates to an isolated, purified human nucleic acid (I)
CC that has the same sequence as a mRNA found in humans and is a SAGE
CC (serial analysis of gene expression) tag comprising a single stranded
CC probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC diagnostic and prognostic markers of cancer, especially of the colon and
CC pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC SAGE tags of the invention.
XX
SQ Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 other;

Query Match 0.6%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy        954 CATGTGTTGTGTGCA 968
              ||||||  ||| ||||
Db          1 CATGTGGTGTATGCA 15


RESULT 339
ABK32389
ID   ABK32389 standard; DNA; 15 BP.
XX
AC   ABK32389;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human colon cancer SAGE tag #490.
XX
KW   Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW   serial analysis of gene expression; diagnostic; prognostic; probe;
KW   cancer marker; ss.
XX
OS   Homo sapiens.
XX
PN   US6333152-B1.
XX
PD   25-DEC-2001.
XX
PF   20-MAY-1998;   98US-0081646.
XX
PR   20-MAY-1998;   98US-0081646.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Zhang L,  Zhou W;
XX
DR   WPI; 2002-153821/20.
XX
PT   New human nucleic acid containing specific SAGE tags, useful as
PT   diagnostic markers for cancer, also derived probes  -
XX
PS   Disclosure; Column 55; 161pp; English.
XX
CC   The invention relates to an isolated, purified human nucleic acid (I)
CC   that has the same sequence as a mRNA found in humans and is a SAGE
CC   (serial analysis of gene expression) tag comprising a single stranded
CC   probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC   diagnostic and prognostic markers of cancer, especially of the colon and
CC   pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC   SAGE tags of the invention.
XX
SQ   Sequence 15 BP; 3 A; 2 C; 5 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        954 CATGTGTTGTGTGCA 968
              ||||||  ||| ||||
Db          1 CATGTGGTGTATGCA 15


RESULT 340
ACA09934/c
ID   ACA09934 standard; RNA; 15 BP.
XX
AC   ACA09934;
XX
DT   03-JUN-2003  (first entry)
XX
DE   Necrosis factor kappa B sub-unit modulating enzyme target #127.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW   lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW   oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW   lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW   chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW   cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW   gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-0864785.
XX
PR   15-AUG-1994;   94US-0291932.
PR   07-DEC-1992;   92US-0987132.
PR   18-MAY-1994;   94US-0245466.
PR   23-DEC-1996;   96US-0777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression
PT   of a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases  -
XX
PS   Claim 3; Page 63; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel
CC   enzymatic nucleic acid molecule.
XX
SQ   Sequence 15 BP; 1 A; 6 C; 1 G; 7 U; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.4e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        918 ATGAGAAAAGAGAGG 932
              ||||||| || |||
Db         15 ATGAGAAAGGACAGG 1
```

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RESULT 341
AAQ68042/c
ID   AAQ68042 standard; DNA; 16 BP.
XX
AC   AAQ68042;
XX
DT   25-MAR-2003  (updated)
DT   16-DEC-1994  (first entry)
XX
DE   Probe for HCV genotyping (HCV 4, subtype 4c).
XX
KW   Hepatitis C virus; HCV; probe; genotyping; hybridisation;
KW   non-A, non-B hepatitis; NANBH; ss.
XX
OS   Synthetic.
XX
PN   WO9412670-A2.
XX
PD   09-JUN-1994.
XX
PF   26-NOV-1993;   93WO-EP03325.
XX
PR   27-NOV-1992;   92EP-0403222.
PR   31-AUG-1993;   93EP-0402129.
XX
PA   (INNO-) INNOGENETICS NV SA.
XX
PI   Maertens G,  Rossau R,  Stuyver L,  Van Heuverswyn H;
XX
DR   WPI; 1994-200296/24.
XX
PT   Process for genotyping Hepatitis C virus (HCV) isolates -
PT   utilises probes hybridising to HCV isolate domains
XX
PS   Claim 6; Page 67; 96pp; English.
XX
CC   Genotyping HCV utilises probes hybridising to HCV isolate domains.
CC   HCV types 2, 3, 4, 5 or 6 and subtypes 1a, 1b, 2a, 2b, 3a, 3b,
CC   3c, 4a, 4b, 4c, 4d, 4e, 4f, 4g and 4h can be typed.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 5 A; 2 C; 4 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.7e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1029 AAATTTCCAAGCACT 1043
              ||||||| |||| |
Db         15 AAATTTCCGAGCATT 1

RESULT 342
AAQ68049/c
ID   AAQ68049 standard; DNA; 16 BP.
XX
AC   AAQ68049;
XX
DT   25-MAR-2003  (updated)
DT   16-DEC-1994  (first entry)
XX
DE   Probe for HCV genotyping (HCV 4, subtypes 4c; 4g and 4h (provisional)).
XX
KW   Hepatitis C virus; HCV; probe; genotyping; hybridisation;
KW   non-A, non-B hepatitis; NANBH; ss.
XX
OS   Synthetic.
XX
PN   WO9412670-A2.
XX
PD   09-JUN-1994.
XX
PF   26-NOV-1993;   93WO-EP03325.
XX
PR   27-NOV-1992;   92EP-0403222.
PR   31-AUG-1993;   93EP-0402129.
XX
PA   (INNO-) INNOGENETICS NV SA.
XX
PI   Maertens G,  Rossau R,  Stuyver L,  Van Heuverswyn H;
XX
DR   WPI; 1994-200296/24.
XX
PT   Process for genotyping Hepatitis C virus (HCV) isolates -
PT   utilises probes hybridising to HCV isolate domains
XX
PS   Claim 6; Page 67; 96pp; English.
XX
CC   Genotyping HCV utilises probes hybridising to HCV isolate domains.
CC   HCV types 2, 3, 4, 5 or 6 and subtypes 1a, 1b, 2a, 2b, 3a, 3b,
CC   3c, 4a, 4b, 4c, 4d, 4e, 4f, 4g and 4h can be typed.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 3 A; 2 C; 6 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.7e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1027 CAAAATTTCCAAGCA 1041
              | |||||||||| |||
Db         15 CCAAATTTCCAGGCA 1

RESULT 343
AAV49185
ID   AAV49185 standard; DNA; 16 BP.
XX
AC   AAV49185;
XX
DT   15-OCT-1998  (first entry)
XX
DE   rb gene antisense oligonucleotide rb-N-133.
XX
KW   rb gene; antisense oligonucleotide; modulate; gene expression; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   EP856579-A1.
XX
PD   05-AUG-1998.
XX
PF   31-JAN-1997;   97EP-0101531.
XX
PR   31-JAN-1997;   97EP-0101531.
XX
PA   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
PI   Brysch W,  Schlingensiepen K;
XX
DR   WPI; 1998-400910/35.
XX
PT   Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT   consecutive guanosine or inosine - and have specific ratio of
PT   residues able to form two or three hydrogen bonds, have greater
PT   activity and reduced toxicity, used therapeutically or to modulate
PT   growth of cells in culture
XX
PS   Example 7; Fig 9c; 286pp; English.
XX
CC   AAV49008-236 represent antisense oligonucleotides directed against
CC   the rb gene. Of these, only oligonucleotides AAV49008-52 resulted in
CC   effective downregulation of negative growth control by rb, while
CC   oligonucleotides AAV49052-236 had little effect. The oligonucleotides
```

```
CC   exemplify the invention. The specification describes oligonucleotides
CC   that contain 8-30 nucleotides, which contain at most 8 nucleotides
CC   that can each form three hydrogen bonds to cytosine; do not contain
CC   four consecutive nucleotides able to form three H-bonds each to four
CC   consecutive cytosines; do not contain two sequences of three consecutive
CC   nucleotides each able to form three H-bonds to three consecutive
CC   cytosines, and the ratio between residues able to form two H-bonds
CC   each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The
CC   oligonucleotides are used to modulate expression of genes, particularly
CC   the genes for p53, ErB-2, junB, junD, TGF-beta 1 or beta 2 to control
CC   proliferation of primary cell cultures (e.g. bone marrow stem, liver or
CC   kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
CC   oligonucleotides can also be used to analyse function of proteins (by
CC   altering their expression or activity) and therapeutically, e.g. in
CC   cases of cancer or (targeting TGF) for stimulating the immune system.
XX
SQ   Sequence 16 BP; 6 A; 0 C; 2 G; 8 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.7e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        985 TGATTTTGAGATTAA 999
              |||||||||  ||||
Db          2 TGATTTTGAATTTAA 16


RESULT 344
AAA50155/c
ID   AAA50155 standard; DNA; 16 BP.
XX
AC   AAA50155;
XX
DT   07-NOV-2000  (first entry)
XX
DE   PCR primer ZC19676.
XX
KW   Zins3; insulin; relaxin; human; NIDDM; diagnosis;
KW   non-insulin dependent diabetes mellitus; PCR primer; ss.
XX
OS   Unidentified.
XX
PN   WO200047776-A2.
XX
PD   17-AUG-2000.
XX
PF   10-FEB-2000; 2000WO-US03515.
XX
PR   12-FEB-1999;   99US-0198248.
PR   12-FEB-1999;   99US-0250125.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Jaspers SR,  Whitmore TE,  Conklin DC,  Lofton-Day CE,  Lok S;
XX
DR   WPI; 2000-558220/51.
XX
PT   Identifying mutations in human chromosome 1p31, preferably a zins3 gene
PT   mutation, comprises using an insulin/relaxin family member (designated
PT   zins3), useful for diagnosing non-insulin dependent diabetes -
XX
PS   Disclosure; Page 47; 51pp; English.
XX
CC   This oligonucleotide primer, termed ZC19676, was used in a method
CC   of the invention.  The invention relates to zins3 (see AAY95770), a
CC   novel member of the insulin/relaxin family whose gene maps to a
CC   region of chromosome 1 that correlates with a heritable form of
CC   non-insulin dependent diabetes mellitus (NIDDM).  The invention
CC   provides methods for identifying abnormalities in expression of
CC   zins3 that are a factor in causing, or predisposing, a person to
CC   some defect in glucose metabolism, such as NIDDM.
XX
SQ   Sequence 16 BP; 5 A; 4 C; 5 G; 2 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.7e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        692 ACTGATTGCTGTACC 706
              ||||||  |||||  ||
Db         15 ACTGATGGCTGTTCC 1


RESULT 345
AAD31911
ID   AAD31911 standard; DNA; 16 BP.
XX
AC   AAD31911;
XX
DT   18-JUN-2002  (first entry)
XX
DE   Rickettsia prowazekii beta-globin DNA.
XX
KW   Microbial virulence factor; genetic predisposition; Alzheimer's disease;
KW   Parkinson's disease; schizophrenia; frontotemporal lobe dementia;
KW   hereditary multi-infarct dementia; primary X-linked mental retardation;
KW   dementia; myopathy; familial British dementia; psychiatric disorder;
KW   transgenic animal; beta-globin; ds.
XX
OS   Rickettsia prowazekii.
XX
PN   WO200214546-A1.
XX
PD   21-FEB-2002.
XX
PF   15-FEB-2001; 2001WO-IB00189.
XX
PR   16-AUG-2000; 2000WO-IB01127.
XX
PA   (FRIT/) FRITZSCHE M.
XX
PI   Fritzsche M;
XX
DR   WPI; 2002-241910/29.
XX
PT   Use of DNA sequence having fragment of nucleic acid encoding putative
PT   microbial virulence factor useful for identification of disease e.g.
PT   Alzheimer's disease, caused by mutations or for genetic predisposition
PT   -
XX
PS   Claim 6; Page 24; 52pp; English.
XX
CC   The present invention relates to the use of a DNA sequence comprising a
CC   fragment of a nucleic acid encoding a putative microbial virulence factor
CC   for the identification of a disease caused by mutations or for a genetic
CC   predisposition. The invention also relates to a method for identification
CC   of a disease which comprises detecting the presence of a mutation within
CC   a nucleic acid sequence of the fragment of virulence factor in a tissue-
CC   or blood sample of a subject, where the tissue sample is a foetal graft
CC   for neurotransplantation and where the sequence is inserted in the 3'
CC   UTR (untranslated region) of the gene and mutation is found in the
CC   polyadenylation signal of G1. The method is useful for identification
CC   of a disease caused by mutation or for their genetic predisposition
CC   where the disease is human disease which is from Alzheimer's disease,
CC   Parkinson's disease, schizophrenia, myopathy, other forms of dementias
CC   (frontotemporal lobe dementia, autosomal dominant Parkinson Lewy-Body
CC   dementia, hereditary multi-infarct dementia, familial British dementia,
CC   primary X-linked mental retardation) and where the human disease
CC   constitutes a predisposition or a genetic variation, the pathological
CC   manifestation of which is triggered by medicaments or drugs which is
CC   preferably cannabis, where the manifestation comprises any forms of
CC   dementia, schizophrenia or related psychiatric disorders. The invention
CC   also relates to transgenic animals (e.g. comprising a non-functional
CC   endogenous cannabinoid receptor (CB1) gene) which are useful for the
CC   identifying or screening of compounds that have an effect on the
CC   activity, expression or regulation of the translated protein (e.g.
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CC   CB1 protein). The present sequence is Rickettsia prowazekii DNA
CC   encoding beta-globin protein, a virulence factor protein. This
CC   sequence is used in the exemplification of the invention.
XX
SQ   Sequence 16 BP; 10 A; 1 C; 0 G; 5 T; 0 other;

  Query Match             0.6%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.7e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        933 ATGTACTAAAAATAA 947
              || ||| ||||||||
Db          2 ATTTACAAAAAATAA 16


RESULT 346
ABC07964
ID   ABC07964 standard; DNA; 13 BP.
XX
AC   ABC07964;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 7955 for detecting SNP TSC0002247.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 7955; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 5 T; 1 other;

  Query Match             0.6%;  Score 11.6;  DB 1;  Length 13;
  Best Local Similarity   91.7%;  Pred. No. 2.1e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATT 997
              ||||||||||:
Db          2 GATTTTGAGATY 13


RESULT 347
ABC07965/c
ID   ABC07965 standard; DNA; 13 BP.
XX
AC   ABC07965;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 7956 for detecting SNP TSC0002247.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 7956; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 3 C; 0 G; 4 T; 1 other;

  Query Match             0.6%;  Score 11.6;  DB 1;  Length 13;
  Best Local Similarity   91.7%;  Pred. No. 2.1e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATT 997
              ||||||||||:
Db         12 GATTTTGAGATY 1


RESULT 348
ABC52584
ID   ABC52584 standard; DNA; 13 BP.
XX
AC   ABC52584;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 52601 for detecting SNP TSC0014585.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
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KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 52601; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 3 T; 1 other;

  Query Match             0.6%;  Score 11.6;  DB 1;  Length 13;
  Best Local Similarity   91.7%;  Pred. No. 2.1e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        977 GGAGATGTTGAT 988
              ||||||||||:
Db          2 GGAGATGTTGAY 13


RESULT 349
ABC52585/c
ID   ABC52585 standard; DNA; 13 BP.
XX
AC   ABC52585;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 52602 for detecting SNP TSC0014585.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 52602; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 3 T; 1 other;

  Query Match             0.6%;  Score 11.6;  DB 1;  Length 13;
  Best Local Similarity   91.7%;  Pred. No. 2.1e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        977 GGAGATGTTGAT 988
              ||||||||||:
Db         12 GGAGATGTTGAY 1


RESULT 350
ABL45742/c
ID   ABL45742 standard; DNA; 15 BP.
XX
AC   ABL45742;
XX
DT   03-MAY-2002  (first entry)
XX
DE   Human MMP13 gene allele specific primer SEQ ID NO: 30.
XX
KW   Human; matrix metalloproteinase 13 (collagenase 3); MMP13; cancer;
KW   arthritis; haplotype; single nucleotide polymorphism; SNP; enzyme;
KW   cytostatic; antiarthritic; gene therapy; chromosome 11q22.3;
KW   PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200206294-A2.
XX
PD   24-JAN-2002.
XX
PF   13-JUL-2001; 2001WO-US22238.
XX
PR   13-JUL-2000; 2000US-217950P.
PR   17-AUG-2000; 2000WO-US22693.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Finkel K,  Kliem SE,  Messer C,  Tanguay DA;
XX
DR   WPI; 2002-171797/22.
XX
PT   Novel genetic variants of matrix metalloproteinase 13 (collagenase 3)
PT   gene useful in studying expression and function of the protein, and for
PT   screening drugs to treat diseases e.g. cancer and arthritis -
XX
PS   Claim 16; Page 14; 110pp; English.
```

```
XX
CC   The present invention provides the cDNA, protein and gene fragments of
CC   the human matrix metalloproteinase 13 (collagenase 3) (MMP13). Also
CC   provided are single nucleotide polymorphisms (SNPs) identified within the
CC   sequences. The sequences can be used to haplotype an individual and in
CC   the treatment of cancer and arthritis, including metastatic cancers. The
CC   present sequence is a PCR primer for the MMP13 gene, which is found on
CC   chromosome 11q22.3.
XX
SQ   Sequence 15 BP; 4 A; 1 C; 2 G; 7 T; 1 other;

  Query Match             0.6%;  Score 11.6;  DB 1;  Length 15;
  Best Local Similarity   91.7%;  Pred. No. 2.7e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        909 CAATTCAAAATG 920
              :|||||||||||
Db         14 YAATTCAAAATG 3


RESULT 351
ABC01932
ID   ABC01932 standard; DNA; 13 BP.
XX
AC   ABC01932;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 1923 for detecting SNP TSC0000750.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 1923; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        987 ATTTTGAGATTAA 999
              |||||||||| |
Db          1 ATTTTGAGATTTA 13


RESULT 352
ABC01933/c
ID   ABC01933 standard; DNA; 13 BP.
XX
AC   ABC01933;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 1924 for detecting SNP TSC0000750.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 1924; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        987 ATTTTGAGATTAA 999
              |||||||||| |
Db         13 ATTTTGAGATTTA 1


RESULT 353
ABC09790
ID   ABC09790 standard; DNA; 13 BP.
XX
AC   ABC09790;
XX
```

```
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 9781 for detecting SNP TSC0002545.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 9781; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1050 GAATTTTGAGAGA 1062
              | ||||||||||||
Db          1 GGATTTTGAGAGA 13


RESULT 354
ABC09791/c
ID   ABC09791 standard; DNA; 13 BP.
XX
AC   ABC09791;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 9782 for detecting SNP TSC0002545.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 9782; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1050 GAATTTTGAGAGA 1062
              | ||||||||||||
Db          13 GGATTTTGAGAGA 1


RESULT 355
ABC10178
ID   ABC10178 standard; DNA; 13 BP.
XX
AC   ABC10178;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 10169 for detecting SNP TSC0002602.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
```

```
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 10169; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 6 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1052 ATTTTGAGAGAGG 1064
              |||| ||||||||
Db          1 ATTTGGAGAGAGG 13


RESULT 356
ABC10179/c
ID   ABC10179 standard; DNA; 13 BP.
XX
AC   ABC10179;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 10170 for detecting SNP TSC0002602.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 10170; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1052 ATTTTGAGAGAGG 1064
              |||| ||||||||
Db         13 ATTTGGAGAGAGG 1


RESULT 357
ABC19330
ID   ABC19330 standard; DNA; 13 BP.
XX
AC   ABC19330;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 19347 for detecting SNP TSC0004035.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 19347; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 0 C; 6 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        971 TGTTGTGGAGATG 983
              |||||||| ||||
Db          1 TGTTGTGGTGATG 13
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RESULT 358
ABC19331/c
ID   ABC19331 standard; DNA; 13 BP.
XX
AC   ABC19331;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 19348 for detecting SNP TSC0004035.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 19348; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 6 C; 0 G; 1 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        971 TGTTGTGGAGATG 983
              ||||||||  ||||
Db         13 TGTTGTGGTGATG 1


RESULT 359
ABC25676
ID   ABC25676 standard; DNA; 13 BP.
XX
AC   ABC25676;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25693 for detecting SNP TSC0006441.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 25693; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 other;

  ıery Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 TTATTGATAATAT 759
              ||| |||||||||
Db          1 TTAATGATAATAT 13


RESULT 360
ABC25676/c
ID   ABC25676 standard; DNA; 13 BP.
XX
AC   ABC25676;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25693 for detecting SNP TSC0006441.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
```

```
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 25693; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 0 C; 1 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1679 ATATTATCTTTAA 1691
              ||||||||  ||||
Db         13 ATATTATCATTAA 1


RESULT 361
ABC25677
ID   ABC25677 standard; DNA; 13 BP.
XX
AC   ABC25677;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25694 for detecting SNP TSC0006441.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 25694; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 1 C; 0 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1679 ATATTATCTTTAA 1691
              ||||||||  ||||
Db         13 ATATTATCATTAA 1


RESULT 362
ABC25677/c
ID   ABC25677 standard; DNA; 13 BP.
XX
AC   ABC25677;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25694 for detecting SNP TSC0006441.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 25694; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 1 C; 0 G; 6 T; 0 other;
```

```
  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 TTATTGATAATAT 759
              ||| ||||||||||
Db         13 TTAATGATAATAT 1


RESULT 363
ABC26112
ID   ABC26112 standard; DNA; 13 BP.
XX
AC   ABC26112;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 26129 for detecting SNP TSC0006789.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 26129; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 0 C; 3 G; 2 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        828 AGGAGATAGAAAT 840
              | ||||||||||||
Db          1 AAGAGATAGAAAT 13


RESULT 364
ABC26113/c
ID   ABC26113 standard; DNA; 13 BP.
XX
AC   ABC26113;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 26130 for detecting SNP TSC0006789.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 26130; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 3 C; 0 G; 8 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        828 AGGAGATAGAAAT 840
              | ||||||||||||
Db         13 AAGAGATAGAAAT 1


RESULT 365
ABC28388
ID   ABC28388 standard; DNA; 13 BP.
XX
AC   ABC28388;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 28405 for detecting SNP TSC0008109.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
```

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PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 28405; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        863 ATAGGTTATGTTA 875
              ||||| |||||||
Db          1 ATAGGGTATGTTA 13


RESULT 366
ABC28389/c
ID   ABC28389 standard; DNA; 13 BP.
XX
AC   ABC28389;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 28406 for detecting SNP TSC0008109.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 28406; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        863 ATAGGTTATGTTA 875
              ||||| |||||||
Db         13 ATAGGGTATGTTA 1


RESULT 367
ABC28810
ID   ABC28810 standard; DNA; 13 BP.
XX
AC   ABC28810;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 28827 for detecting SNP TSC0008399.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 28827; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
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CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 5 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        972 GTTGTGGAGATGT 984
              ||| |||||||||
Db          1 GTTTTGGAGATGT 13


RESULT 368
ABC28811/c
ID   ABC28811 standard; DNA; 13 BP.
XX
AC   ABC28811;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 28828 for detecting SNP TSC0008399.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 28828; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 5 C; 0 G; 2 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        972 GTTGTGGAGATGT 984
              ||| |||||||||
Db         13 GTTTTGGAGATGT 1


RESULT 369
ABC31996
ID   ABC31996 standard; DNA; 13 BP.
XX
AC   ABC31996;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 32013 for detecting SNP TSC0009986.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 32013; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 9 A; 0 C; 4 G; 0 U; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        917 AATGAGAAAAGAG 929
              || ||||||||||
Db          1 AAAGAGAAAAGAG 13


RESULT 370
ABC31997/c
ID   ABC31997 standard; DNA; 13 BP.
XX
AC   ABC31997;
XX
DT   20-FEB-2002  (first entry)
XX
```

```
DE   Oligonucleotide SEQ ID NO 32014 for detecting SNP TSC0009986.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 32014; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 0 A; 4 C; 0 G; 9 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        917 AATGAGAAAAGAG 929
              || ||||||||||
Db         13 AAAGAGAAAAGAG 1


RESULT 371
ABC32824
ID   ABC32824 standard; DNA; 13 BP.
XX
AC   ABC32824;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 32841 for detecting SNP TSC0010305.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 32841; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        865 AGGTTATGTTATT 877
              |||| ||||||||
Db          1 AGGTGATGTTATT 13


RESULT 372
ABC32825/c
ID   ABC32825 standard; DNA; 13 BP.
XX
AC   ABC32825;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 32842 for detecting SNP TSC0010305.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
```

```
PS   Claim 1; SEQ ID 32842; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        865 AGGTTATGTTATT 877
              |||| ||||||||
Db         13 AGGTGATGTTATT 1


RESULT 373
ABC33322
ID   ABC33322 standard; DNA; 13 BP.
XX
AC   ABC33322;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 33339 for detecting SNP TSC0010611.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 33339; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              |||||| ||||||
Db          1 GATTTTAAGATTA 13


RESULT 374
ABC33323/c
ID   ABC33323 standard; DNA; 13 BP.
XX
AC   ABC33323;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 33340 for detecting SNP TSC0010611.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 33340; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              |||||| ||||||
Db         13 GATTTTAAGATTA 1
```

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RESULT 375
ABC33324
ID   ABC33324 standard; DNA; 13 BP.
XX
AC   ABC33324;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 33341 for detecting SNP TSC0010611.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 33341; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              |||||| ||||||
Db          1 GATTTTTAGATTA 13


RESULT 376
ABC33325/c
ID   ABC33325 standard; DNA; 13 BP.
XX
AC   ABC33325;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 33342 for detecting SNP TSC0010611.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 33342; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              |||||| ||||||
Db         13 GATTTTTAGATTA 1


RESULT 377
ABC34314
ID   ABC34314 standard; DNA; 13 BP.
XX
AC   ABC34314;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 34331 for detecting SNP TSC0010963.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
```

```
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 34331; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        981 ATGTTGATTTTGA 993
              | ||||||||||||
Db          1 AGGTTGATTTTGA 13


RESULT 378
ABC34315/c
ID   ABC34315 standard; DNA; 13 BP.
XX
AC   ABC34315;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 34332 for detecting SNP TSC0010963.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 34332; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        981 ATGTTGATTTTGA 993
              | ||||||||||||
Db         13 AGGTTGATTTTGA 1


RESULT 379
ABC36822
ID   ABC36822 standard; DNA; 13 BP.
XX
AC   ABC36822;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 36839 for detecting SNP TSC0011528.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 36839; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
```

```
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        741 TGAGGATTATTGA 753
              ||||||| |||||
Db          1 TGAGGATGATTGA 13


RESULT 380
ABC36823/c
ID   ABC36823 standard; DNA; 13 BP.
XX
AC   ABC36823;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 36840 for detecting SNP TSC0011528.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 36840; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        741 TGAGGATTATTGA 753
              ||||||| |||||
Db         13 TGAGGATGATTGA 1


RESULT 381
ABC39158
ID   ABC39158 standard; DNA; 13 BP.
XX
AC   ABC39158;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 39175 for detecting SNP TSC0012022.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 39175; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              || ||||||||||
Db          1 GAGTTTGAGATTA 13


RESULT 382
ABC39159/c
ID   ABC39159 standard; DNA; 13 BP.
XX
AC   ABC39159;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 39176 for detecting SNP TSC0012022.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
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PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 39176; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              || ||||||||||
Db         13 GAGTTTGAGATTA 1


RESULT 383
ABC39592/c
ID   ABC39592 standard; DNA; 13 BP.
XX
AC   ABC39592;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 39609 for detecting SNP TSC0012105.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 39609; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 1 G; 9 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        937 ACTAAAAATAAGT 949
              |||||||||| |
Db         13 ACTAAAAATAAAT 1


RESULT 384
ABC39593
ID   ABC39593 standard; DNA; 13 BP.
XX
AC   ABC39593;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 39610 for detecting SNP TSC0012105.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 39610; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
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CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 9 A; 1 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        937 ACTAAAAATAAGT 949
              ||||||||||| |
Db          1 ACTAAAAATAAAT 13


RESULT 385
ABC45652
ID   ABC45652 standard; DNA; 13 BP.
XX
AC   ABC45652;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 45669 for detecting SNP TSC0013276.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 45669; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 1 G; 8 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 TTATTGATAATAT 759
              ||||||||||| |
Db          1 TTATTGATAATTT 13


RESULT 386
ABC45653/c
ID   ABC45653 standard; DNA; 13 BP.
XX
AC   ABC45653;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 45670 for detecting SNP TSC0013276.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 45670; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 1 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 TTATTGATAATAT 759
              ||||||||||| |
Db         13 TTATTGATAATTT 1


RESULT 387
ABC48782
ID   ABC48782 standard; DNA; 13 BP.
XX
AC   ABC48782;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 48799 for detecting SNP TSC0013865.
XX
```

```
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 48799; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        862 AATAGGTTATGTT 874
              ||||||||  ||||
Db          1 AATAGGTTTTGTT 13


RESULT 388
ABC48783/c
ID   ABC48783 standard; DNA; 13 BP.
XX
AC   ABC48783;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 48800 for detecting SNP TSC0013865.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 48800; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        862 AATAGGTTATGTT 874
              ||||||||  ||||
Db         13 AATAGGTTTTGTT 1


RESULT 389
ABC74324
ID   ABC74324 standard; DNA; 13 BP.
XX
AC   ABC74324;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 74341 for detecting SNP TSC0019112.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 74341; 29pp + Sequence Listing; German.
XX
```

```
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        865 AGGTTATGTTATT 877
              || ||||||||||
Db          1 AGATTATGTTATT 13


RESULT 390
ABC74325/c
ID   ABC74325 standard; DNA; 13 BP.
XX
AC   ABC74325;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 74342 for detecting SNP TSC0019112.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 74342; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        865 AGGTTATGTTATT 877
              || ||||||||||
Db         13 AGATTATGTTATT 1


RESULT 391
ABC78332
ID   ABC78332 standard; DNA; 13 BP.
XX
AC   ABC78332;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 78349 for detecting SNP TSC0019960.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 78349; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              || ||||||||||
Db          1 GAATTTGAGATTA 13


RESULT 392
ABC78333/c
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```
ID   ABC78333 standard; DNA; 13 BP.
XX
AC   ABC78333;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 78350 for detecting SNP TSC0019960.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 78350; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        986 GATTTTGAGATTA 998
              || ||||||||||
Db         13 GAATTTGAGATTA 1


RESULT 393
ABC81828
ID   ABC81828 standard; DNA; 13 BP.
XX
AC   ABC81828;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 81845 for detecting SNP TSC0020690.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 81845; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 4 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        753 ATAATATGGGTCA 765
              ||||||||||| |
Db          1 ATAATATGGGTGA 13


RESULT 394
ABC81829/c
ID   ABC81829 standard; DNA; 13 BP.
XX
AC   ABC81829;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 81846 for detecting SNP TSC0020690.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
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DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 81846; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        753 ATAATATGGGTCA 765
              ||||||||||| |
Db         13 ATAATATGGGTGA 1


RESULT 395
ABC85228/c
ID   ABC85228 standard; DNA; 13 BP.
XX
AC   ABC85228;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 85245 for detecting SNP TSC0021439.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 85245; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        907 TACAATTCAAAAT 919
              ||||| |||||||
Db         13 TACAAATCAAAAT 1


RESULT 396
ABC85229
ID   ABC85229 standard; DNA; 13 BP.
XX
AC   ABC85229;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 85246 for detecting SNP TSC0021439.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 85246; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy        907 TACAATTCAAAAT 919
              ||||| |||||||
Db          1 TACAAATCAAAAT 13


RESULT 397
ABC87324
ID   ABC87324 standard; DNA; 13 BP.
XX
AC   ABC87324;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 87341 for detecting SNP TSC0021970.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 87341; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        744 GGATTATTGATAA 756
              |||||||||||  |
Db          1 GGATTATTGATTA 13


RESULT 398
ABC87325/c
ID   ABC87325 standard; DNA; 13 BP.
XX
AC   ABC87325;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 87342 for detecting SNP TSC0021970.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 87342; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        744 GGATTATTGATAA 756
              |||||||||||  |
Db         13 GGATTATTGATTA 1


RESULT 399
ABC89774/c
ID   ABC89774 standard; DNA; 13 BP.
XX
AC   ABC89774;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 89791 for detecting SNP TSC0022507.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
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PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 89791; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 2 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        993 AGATTAAATCTCT 1005
              | ||||||||||||
Db         13 AAATTAAATCTCT 1


RESULT 400
ABC89775
ID   ABC89775 standard; DNA; 13 BP.
XX
AC   ABC89775;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 89792 for detecting SNP TSC0022507.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 89792; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 2 C; 0 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        993 AGATTAAATCTCT 1005
              | ||||||||||||
Db          1 AAATTAAATCTCT 13


RESULT 401
ABF04322
ID   ABF04322 standard; DNA; 13 BP.
XX
AC   ABF04322;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 104319 for detecting SNP TSC0026075.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 104319; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
```

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CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 0 C; 0 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 TTATTGATAATAT 759
              ||||| |||||||
Db          1 TTATTAATAATAT 13


RESULT 402
ABF04323/c
ID   ABF04323 standard; DNA; 13 BP.
XX
AC   ABF04323;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 104320 for detecting SNP TSC0026075.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 104320; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 0 C; 0 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        747 TTATTGATAATAT 759
              ||||| |||||||
Db         13 TTATTAATAATAT 1


RESULT 403
ABF05662
ID   ABF05662 standard; DNA; 13 BP.
XX
AC   ABF05662;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 105659 for detecting SNP TSC0026485.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 105659; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        741 TGAGGATTATTGA 753
              ||||| |||||||
Db          1 TGAGGTTTATTGA 13


RESULT 404
ABF05663/c
ID   ABF05663 standard; DNA; 13 BP.
XX
AC   ABF05663;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 105660 for detecting SNP TSC0026485.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
```

```
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 105660; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        741 TGAGGATTATTGA 753
              ||||| |||||||
Db         13 TGAGGTTTATTGA 1


RESULT 405
ABF08232
ID   ABF08232 standard; DNA; 13 BP.
XX
AC   ABF08232;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 108229 for detecting SNP TSC0027101.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 108229; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        666 AGAGGGTTTACTT 678
              |||||||||| ||
Db          1 AGAGGGTTTATTT 13


RESULT 406
ABF08233/c
ID   ABF08233 standard; DNA; 13 BP.
XX
AC   ABF08233;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 108230 for detecting SNP TSC0027101.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 108230; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
```

```
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        666 AGAGGGTTTACTT 678
              ||||||||||| ||
Db         13 AGAGGGTTTATTT 1


RESULT 407
ABF14006
ID   ABF14006 standard; DNA; 13 BP.
XX
AC   ABF14006;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 114003 for detecting SNP TSC0028537.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 114003; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        708 GAAATTGCTGTGG 720
              ||||||| |||||
Db          1 GAAATTGATGTGG 13


RESULT 408
ABF14007/c
ID   ABF14007 standard; DNA; 13 BP.
XX
AC   ABF14007;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 114004 for detecting SNP TSC0028537.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 114004; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        708 GAAATTGCTGTGG 720
              ||||||| |||||
Db         13 GAAATTGATGTGG 1


RESULT 409
ABF14058
ID   ABF14058 standard; DNA; 13 BP.
XX
```

```
AC   ABF14058;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 114055 for detecting SNP TSC0028548.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 114055; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        980 GATGTTGATTTTG 992
              ||||||||||  ||
Db          1 GATGTTGATTATG 13


RESULT 410
ABF14059/c
ID   ABF14059 standard; DNA; 13 BP.
XX
AC   ABF14059;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 114056 for detecting SNP TSC0028548.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 114056; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        980 GATGTTGATTTTG 992
              ||||||||||  ||
Db         13 GATGTTGATTATG 1


RESULT 411
ABF15356
ID   ABF15356 standard; DNA; 13 BP.
XX
AC   ABF15356;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115353 for detecting SNP TSC0028921.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
```

```
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115353; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 1 C; 4 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        754 TAATATGGGTCAA 766
              ||||||||||| |
Db          1 TAATATGGGTCGA 13


RESULT 412
ABF15357/c
ID   ABF15357 standard; DNA; 13 BP.
XX
AC   ABF15357;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115354 for detecting SNP TSC0028921.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115354; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 4 C; 1 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        754 TAATATGGGTCAA 766
              ||||||||||| |
Db         13 TAATATGGGTCGA 1


RESULT 413
ABF17146/c
ID   ABF17146 standard; DNA; 13 BP.
XX
AC   ABF17146;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 117143 for detecting SNP TSC0029312.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 117143; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        906 TTACAATTCAAAA 918
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              |||| ||||||||
Db         13 TTACCATTCAAAA 1


RESULT 414
ABF17147
ID   ABF17147 standard; DNA; 13 BP.
XX
AC   ABF17147;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 117144 for detecting SNP TSC0029312.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 117144; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        906 TTACAATTCAAAA 918
              |||| ||||||||
Db          1 TTACCATTCAAAA 13


RESULT 415
ABF19870/c
ID   ABF19870 standard; DNA; 13 BP.
XX
AC   ABF19870;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 119867 for detecting SNP TSC0029917.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 119867; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1028 AAAATTTCCAAGC 1040
              |||||||||| |
Db         13 AAAATTTCCAAAC 1


RESULT 416
ABF19871
ID   ABF19871 standard; DNA; 13 BP.
XX
AC   ABF19871;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 119868 for detecting SNP TSC0029917.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
```

```
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 119868; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1028 AAAATTTCCAAGC 1040
              ||||||||||| |
Db          1 AAAATTTCCAAAC 13


RESULT 417
ABF22704
ID   ABF22704 standard; DNA; 13 BP.
XX
AC   ABF22704;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 122701 for detecting SNP TSC0030669.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 122701; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 1 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAATA 758
              ||||||| |||||
Db          1 ATTATTGTTAATA 13


RESULT 418
ABF22705/c
ID   ABF22705 standard; DNA; 13 BP.
XX
AC   ABF22705;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 122702 for detecting SNP TSC0030669.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 122702; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
```

```
XX
SQ   Sequence 13 BP; 7 A; 1 C; 0 G; 5 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        746 ATTATTGATAATA 758
              ||||||| |||||
Db         13 ATTATTGTTAATA 1


RESULT 419
ABF23282
ID   ABF23282 standard; DNA; 13 BP.
XX
AC   ABF23282;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 123279 for detecting SNP TSC0030824.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 123279; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 3 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        982 TGTTGATTTTGAG 994
              |||| ||||||||
Db          1 TGTTAATTTTGAG 13


RESULT 420
ABF23283/c
ID   ABF23283 standard; DNA; 13 BP.
XX
AC   ABF23283;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 123280 for detecting SNP TSC0030824.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 123280; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 3 C; 0 G; 3 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        982 TGTTGATTTTGAG 994
              |||| ||||||||
Db         13 TGTTAATTTTGAG 1


RESULT 421
ABF23290
ID   ABF23290 standard; DNA; 13 BP.
XX
AC   ABF23290;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 123287 for detecting SNP TSC0030825.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
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OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 123287; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        987 ATTTTGAGATTAA 999
              ||||||| ||||
Db          1 ATTTTGAGGTTAA 13


RESULT 422
ABF23291/c
ID   ABF23291 standard; DNA; 13 BP.
XX
AC   ABF23291;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 123288 for detecting SNP TSC0030825.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 123288; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 3 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        987 ATTTTGAGATTAA 999
              ||||||| ||||
Db         13 ATTTTGAGGTTAA 1


RESULT 423
ABF26076
ID   ABF26076 standard; DNA; 13 BP.
XX
AC   ABF26076;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 126073 for detecting SNP TSC0031546.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 126073; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
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CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 2 G; 7 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        748 TATTGATAATATG 760
              ||||||| |||||
Db          1 TATTGATTATATG 13


RESULT 424
ABF26077/c
ID   ABF26077 standard; DNA; 13 BP.
XX
AC   ABF26077;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 126074 for detecting SNP TSC0031546.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 126074; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 7 A; 2 C; 0 G; 4 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        748 TATTGATAATATG 760
              ||||||| |||||
Db         13 TATTGATTATATG 1


RESULT 425
ABF28362
ID   ABF28362 standard; DNA; 13 BP.
XX
AC   ABF28362;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 128359 for detecting SNP TSC0032157.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 128359; 29pp + Sequence Listing; German.
X
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 3 G; 6 T; 0 other;

  Query Match             0.5%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        981 ATGTTGATTTTGA 993
              | ||||||||||||
Db          1 AAGTTGATTTTGA 13


RESULT 426
ABF28363/c
ID   ABF28363 standard; DNA; 13 BP.
XX
AC   ABF28363;
XX
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